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ABSTRACT

This paper examines the origins, objectives and structures, funding and cost, programs, learners, and teaching and learning of the radio and television universities in China and the British Open University (BOU). It also discusses the nature and role of each of these entities, including growth and development of higher education and the philosophies underpinning practice. Results of the comparisons show that the systems in the two countries have little difference in form but have different practices. In China, distance higher education is part of a higher education system that is the subsystem of the larger political, social, and economic systems. It is characterized by its submission to the government for the good of society at the sacrifice of individualism. In Britain, the open university has the autonomy to make its own decisions. The open university has roots in the long history of correspondence education in Britain but it is more influenced by the ideas of egalitarianism, democracy, and lifelong education. The study concludes that the type and practice of distance education vary not simply by their historical development but also by their societal context. The paper contains 8 tables, 3 three figures and 58 references. (KC)

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China's Radio & TV Universities and the British Open University: A Comparative Perspective

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TABLE OF CONTENTS

List of abbreviations IV

Introduction V

Part One Background and Contexts 1

Contexts 1
Origins 3
Objectives and structures 7
Funding and cost 10
Summary 15

Part Two Programmes, learners, teaching and learning 16

Programmes 16
Learners 20
Teaching and learning 23
Summary 27

Part Three The Nature and Role of China's RTVUs 29

Growth and development of higher education in China 29
Philosophies underpinning the practice of higher education 33
The nature and role of China's RTVUs 36
Summary 39

Part Four The Nature and Role of the BOU 40

Growth and development of higher education in Britain 40
Philosophies underpinning the practice of higher education 44
The nature and role of the BOU 47
Summary 50

Conclusion 52

Tables 55

Figures 63

References 66

LIST OF ABBREVIATIONS

A-Level:	advanced level
BBC:	British Broadcasting Corporation
BOU:	The British Open University
CCTV:	China Central Television
CETV:	China Education Television
China's RTVUs:	China's Radio & Television Universities
CRTVU:	The Central Radio & Television University
DE:	distance education
DES/OU:	Department of Education and Sciences & The Open University
ETV:	Education Television
GNP:	Gross National Product
ITC:	Independent Television Corporation
LEAs:	local educational authorities
Liaoyuan RTV Schools:	Liaoyuan Radio & Television Schools
MOE:	Ministry of Education
MPT:	Ministry of Post & Telecommunication
MRMTV:	Ministry of Radio, Motion-pictures & Television
PRTVUs:	Provincial Radio & Television Universities
SEdC:	State Education Commission
UGC:	University Grants Committee

INTRODUCTION

China's Radio & TV Universities were established in 1979, after the model of the British Open University. Both of these two distance teaching universities were government initiated and state funded with strong personal support of an influential government leader. However, the practices of distance education between China's Radio & TV Universities and the British Open University are so different that they not only confuse the western distance educators but also their Chinese counterparts as well. Why do these two distance teaching systems share the same notion of distance education but practice it so differently? This monograph will be an attempt to look for an answer to that question.

Comparative analysis will be made of the origin, development and activities of these two distance education systems. Since both China's RTVUs and the BOU belong to the higher education sector, examination will be made of the development the nature and the role of higher education system in each specific context so that the major factors which help shape the general patterns of these two distance higher education systems will be clarified. In doing so, a better understanding can be developed about the practical differences in China's RTVUs and the BOU implementation of distance education by explaining and attributing these differences to the historical and cultural disparity of these two countries.

Higher education never stands aloof from the cultural, political, social and economic influences of a society. The theory and practice of distance education is mainly a western innovation which has its roots in the European ideas of equity, democracy and life-long learning. When it was transplanted into a socialist country like China, it was natural that it would not be accepted without critique. The result of the critical acceptance was the transformation of the nature and the role of distance education, and the adaptation of the format to fit the Chinese context. Therefore, both China's RTVUs and the BOU have been developed taking into account the peculiar conditions of their countries and representing their own national characteristics. The differences, actually, illustrate the influences each context has on the distance education system, in this case, on the two distance teaching university systems in these two different countries.

PART ONE: BACKGROUNDS AND CONTEXTS

The People's Republic of China and the United Kingdom of Great Britain differ considerably in size of area, number of population, product of economies as well as educational system. They provide two quite contrasting cases. Before we start a comparative analysis on the BOU and China's RTVUs, a brief description of country context will help us gain better insight into the practices of distance education in these two countries.

THE CONTEXTS

China

The People's Republic of China, which was founded in 1949, is the third largest country in the world after the former Soviet Union and Canada with a total area of 9.6 million square kilometres. It has the world's largest population and the 1990 population census revealed a still growing population of 1170 million people with an annual growth rate of 1.2% (UNDP, 1994). 72% of the population live in rural areas. Administratively it is divided into 22 provinces, 5 minority autonomous regions and 3 municipalities directly under the care of the central government. Though its gross national product ranked the seventh in the world in 1994, it is still a developing country with a per capita GNP close only to US $470 (World Tables, 1994) due to its large population. The total expenditure on education as percentage of GNP accounted for 3.25% in 1994, lower than the average standard 4% devoted to education in other developing countries.

The national TV network has a coverage of 85% of the territory through microwave links as well as national and international satellites to more than 1,000 local educational TV stations, 6,000 earth stations, with about 30 TV sets per 100 people mainly in urban areas. Access to radio is accessible with an estimate of 18 per 100 people, while the ownership of telephones per 100 people is only 1.3 restricted mainly in urban areas (World Bank, 1994); (Table 1: Communication and Telecommunication Services in China).

The formal educational system in China consists of four levels: pre-school education; primary education; secondary education and higher education. At the founding of the country in 1949, the illiteracy rate was as high as 80% of the total

population. In 1994 it dropped to 22.2% for people 15 years above due to the mass literacy education programme launched by the Government. This was done for the purpose of emancipation of the proletariat at its initial stage, together with the nine year compulsory education policy in 1985 for the purpose of nation building.

In 1994, 97.7% of the age group had access to primary education. The graduates from primary schools, 81.8% go on to junior secondary schools, and 39.9% of the junior secondary school leavers enjoy senior secondary education. As for higher education, only 4.7% of the senior secondary school graduates can progress to it (Achievement of Education in China, 1994). Those who have a higher education background only represent 1.6% of the total population, which is much lower compared with 7.4% of other medium human development countries and 2.5% of those low human development countries (UNDP, 1994). There are 277 million people, accounting for about 24% of the population, who receive regular education annually at different levels. Therefore, in China distance education can offer additional access to education on a large-scale.

Britain

The Chinese context contrasts sharply with that of the United Kingdom. The United Kingdom of Great Britain and Northern Ireland is the official title of the political union of England, Scotland, Wales and Northern Ireland. It is a small island country with a total area of 244,786 square kilometres. The estimated population in 1992 was 57.8 million with an annual growth rate of only 0.3%. The urban population accounts for 89.3% of the total. The country is divided into 64 areas, and they are called counties (44) in England and Wales (8), and called regions in Scotland (9). These areas, in turn, are subdivided into 402 districts (The New Encyclopaedia Britannica, 1986).

Great Britain has a developed mixed private- and public-enterprise economy largely based on services, especially international trade and heavy industries. The gross national product totalled US $ 9512.16 billion in the early 1990s; the GNP per capita was $17, 790 (World Tables, 1994). The total expenditure on education as percentage of GNP accounted for 5.3% in 1991 (UNDP, 1994).

The national TV network service is available to 97% of the population. In 1993 there were an estimated 65.8m. radio receivers and 25m. TV receivers in use, including about 2.44m. satellite TV receiver and 694,000 cable TV subscribers. The state-owned British Broadcasting Corporation (BBC) operates two nationwide channels, while

Independent Television Corporation (ITC) operates the third and the fourth channels, with the fifth one proposed in 1995. The ownership of radio, television and telephone per 100 people is 114, 43, and 48 respectively (World Bank, 1994; EUROPA, 1994).

Britain is a country which has a long history of state-funded education. The educational system consists of five levels: they are pre-school education, primary education, secondary education, further and higher education. Education is compulsory and free, in state-supported schools, between the ages 5 and 18. Those of the age group who can go on to higher education account for 58% of the total, and the estimated statistics in 1990 showed that those who have a higher education background represent 27.8% of the total population (Statistical Yearbook, 1993).

So, China's RTVUs and the BOU arise from very different contexts. China, the largest developing country in the world, with very restricted financial resources, operates the world's largest educational system. The advantage and potential of distance education for providing additional access to education at various levels for a large number of student population at a relatively lower cost are very attractive to the government in terms of training the needed manpower for the construction of four modernisations.

However, Britain is a developed country, and both public and private sectors are making commitments to educational provision to meet the various requirements of its population. It is natural that when the idea of setting up a university of the air was proposed in the late 1960s, both the British government and people were wondering if it was sensible or necessary to set up an open university, or whether to put more money into the existing traditional universities to satisfy the demands for higher education by working adults.

ORIGINS

From the late 1940s education expanded in many countries, both capitalist and socialist, developed and developing.

> The end of the second World War was followed by the rapid expansion of access to education services at all levels in the Western industrialised countries, the Central Europe socialist states and the developing nations of the Third World.
> The expansion of the university sector in developed countries and more recently in developing countries was in part motivated by the increasing demands for educated manpower and in part a response to demands for

> educational equality. At the same time parents, schools and students increasingly came to recognise the extent to which university education was becoming a pre-condition for upward social mobility and for entry to certain professions and occupations (Rumble & Harry 1982: p206).

The situation was similar in China and Britain, especially the expansion of higher education in these two countries.

China's Radio & Television Universities

The history of radio and television colleges in China can be traced back to the early 1960s when several major cities of the country started offering programmes through radio, television, integrated with correspondence communication and face-to-face sessions. The early experience of distance education in China was characteristic of its provision of post-secondary education to working adults due to the demands for professional expertise such as engineers, technicians, primary and secondary school teachers. Unfortunately, all these innovative projects were disrupted when the Cultural Revolution began in 1966, during which the national education system stopped operation.

At the end of the ten year Cultural Revolution in 1976, the backward social and economic situation of the country made the government realise the damage done to its nation by too many political ups and downs, and the national reconstruction became the priority of the government policy in term of realisation of four modernisations. The fulfilment of modernisations depends on the provision of financial, technical as well as human resources. While the former two elements can be obtained by import or help from the international agencies, the development of human resources, especially those urgently needed skilled manpower can only be solved by the country itself. Therefore, the solution to training of technicians and professionals became a challenge to the government.

The reopening of the conventional colleges and universities did not start until the end of 1977, with an annual enrolment of about 300,000, accounting for only 5% of the target group. According to the manpower forecast, China's total workforce was expected to reach 105 millions by the beginning of the 1990s, of which 4.7% should be composed of technical and engineering personnel. In the industrial and transportation sphere, at least 2.9 million new technicians and engineers must be trained and in the field of education 3.5 million new teachers at primary, secondary and tertiary levels were urgently needed (Zhao, 1988). The training needs of the country were far beyond the

capacity and capability of the conventional colleges and universities to cope with. An alternative way of expanding rapidly the access to meet social demands and to respond to the urgent needs for developing human capital through education and training seemed to lie in the employment of modern technologies for the delivery of education to the masses.

The process that led to the establishment of the network of China's radio and television universities started in 1978 when a steering committee, made up of representatives from ministries of education, broadcasting, administration, electronics, finance, commerce, post and telecommunication, met under the chair of the Minister of Education. A feasibility report for setting up a network of radio and television universities was submitted to the State Council in 1978, and an approval was promptly granted. One year preparation saw the establishment of China's RTVUs in 1979 with a mission specified as "serving socialist construction, producing qualified manpower needed for the socialist construction and raising the scientific and cultural level of the whole nation" (*General Provisions for Radio and Television Universities*, 1988).

The British Open University

By contrast, the establishment of the British Open University owed its debt to the three educational trends which contributed to its evolution. These are: needs for reform in part-time education available to adults; the growth of educational broadcasting; and the political objective of promoting the spread of egalitarianism in education (Perry, 1976: p8).

The roots of the British Open University lie much deeper than 1969, the year it came into being. Ideas about distance teaching, about open education, about educational uses for the broadcasting media, had been circulating in Britain for most of the previous half-century due in part to the Britain's educational system which is traditionally elitist and highly restricted:

> In the early 1960s only 6-7 percent of school leavers each year progressed to any form of higher education. The need for more higher education was illustrated by the enrolment figures in the University of London External Degree Program, which had 20,000 UK students, of whom 7,000 studied by correspondence. A further half a million people were also studying correspondence courses provided by a variety of other institutions (Rumble & Harry, 1982: p170).

However, adult education was mainly serving the needs of the middle class. It was non-vocational and it did not offer diplomas or degrees. Very few opportunities

were offered to the adults who wished to embark upon vocational courses at the higher education level, and the needs of adults who could not stop work to enter higher education on a full-time basis and who wished to obtain degrees by working part-time were often not met at all.

Moreover, there was an increased concern expressed about elitism in education and the effects of this on the nature of society. In 1964, Harold Wilson, the new Prime Minister, asked Jennie Lee, a junior minister in the Department of Education and Science, to take special responsibility for the University of the Air project. In 1967 the government established a Planning Committee to work at a comprehensive plan for an open university, and to prepare a draft Charter and Statutes. The Planning Committee Report was published in 1969, providing a blue-print for the university. A Royal Charter was granted in June 1969, establishing the Open University as an independent and autonomous institution authorised to confer its own degrees with the mission specified as being:

> the advancement and dissemination of learning and knowledge by teaching and research...to provide education of university and professional standards for its students and to promote the educational well-being of the community generally (Rumble, 1982: p10).

The comparison of backgrounds shows that the seeds of distance education in both countries were rooted either in the experiences of correspondence education, university extension or radio and television education, compounded by a well established national network of radio and television stations. The missions of these two distance teaching systems manifest a kind of common goal in terms of provision of higher education to adult students and to raise the educational level of the nation.

However, the similarity of missions does not reflect the same ideas and notions that led to the establishment of distance teaching universities in these two countries. The philosophy underpinning the interest towards distance education in UK resides with the ideas of educational democracy, egalitarianism, and life-long learning. Whereas in China, which had just opened its door to the outside world, distance education was more influenced by the idea of the human capital theory, and the potential of distance education for meeting the needs of trained manpower seemed to make the realisation of four modernisations more attainable.

This distinction of philosophies underpinning the establishment of these two systems, therefore, not only gave rise to different policies which shaped the practices and

activities of these two distance education systems but also led to different structures which defined the management and organisation of both systems.

OBJECTIVES AND STRUCTURES

Distance teaching institutions are planned and established in response to perceived educational needs, and the first step in the planning process is to propose a statement of goals to indicate the nature and the role of the institution, the standards which it wishes to attain, the means which it will use, the students it will target and the programmes it will offer.

Unlike conventional universities where academic departments retain overall control over the whole process of teaching, distance teaching systems do not control the whole development, production and distribution for the transmission of instruction at a distance. Instead a collection of functionally distinct departments, both academic and non-academic, together have responsibility for the realisation of the teaching programmes.

China's Radio & Television Universities

China's RTVUs, as designated in the *General Provisions for Radio and Television Universities* are termed as "open higher education institutions which employ multi-media like radio, TV, print and audio and visual devices for delivery of education at a distance". It is a distance education system which is planned academically as a whole, but runs at five different levels, corresponding to the organisation of China's system of national and regional governments. Its aims and objectives are to provide mainly the vocational and technical education leading to diploma for working adults. In addition it also provides programmes for secondary vocational education, on-the-job training, professional training and continuing education to meet the needs for the socialist construction of the country.

Since China is such a large country with disparities in terms of regional, economic, demographic and geographic conditions, one centralised distance teaching university can not accommodate the needs of the local regions, neither can it manage or run this large-scale educational project without financial, physical and human resources assistance from the local governments. Therefore, in order to keep the whole system

working smoothly, China's RTVUs operate at a five-tier organisational structure parallel to their governmental structure. The Central Radio and Television University, at the highest level, is under the direct leadership of the State Education Commission. 43 provincial radio and television universities, at the second level, are under the auspices of provincial, autonomous regional, the three independent municipal and special city governments. Their branch radio and television schools, at the third level, come under civic or prefectural governments. RTVU work stations, at the fourth level, are run either by urban district or rural county education bureaux, or by a specific industry. The lowest tier of the structure is represented by the RTVU classes where the students attend (Figure 1: Five Levels of China's RTVUs).

Thus, China's RTVUs are directed and controlled by the government educational authorities at each corresponding level. These authorities not only control the annual budget appropriation, political and administrative personnel appointments, they also control policy making and overall planning in terms of curricular development and enrolment based on needs assessment for national and local economic development.

There is no political, administrative financial or personnel relationship between each of the five tiers. The only relationship between each tier is limited to academic affairs. The function of the Central Radio and Television University, without students of its own, is more like a course design, development, production and distribution centre with responsibility for academic guidance and assessment on a national scale. The RTVUs at local levels, responsible for the organisation and implementation of instruction, look rather like hundreds of independent conventional institutions operating in response to their local needs, with funding directly from their corresponding governments (McCormick, 1992: p151). Only the provincial-tiered RTVUs are authorised to award diplomas and certificates.

Therefore, the whole system is like an associated model of distance education designated by Neil, which is characteristic of an autonomous university with centralised control diminished in area of financing and support services (Neil, 1981: p120). In doing so the local educational needs which can not be accommodated by the centralised curricular due to small student number and consideration of economies of scale can be met by local RTVUs, which greatly relieve the financial burden from the Central Government.

The British Open University

The objectives of the BOU are to:

> provide opportunities at both undergraduate and postgraduate level of higher education to all adults who for any reason had been or were precluded from achieving their aim through other higher education institutions. In addition the University is to provide updating, refresher and conversion courses for those in employment to facilitate movement between occupations or upwards through the occupational structure (DES/OU Review, 1991).

They are to be achieved by a diversity of means such as broadcasting and technological devices appropriate to higher education, by correspondence tuition, residential courses and seminars and in other relevant ways.

Unlike their Chinese counterpart, the BOU is a university established by a Royal Charter, therefore, its governmental structure was based on the traditional bi-cameral model existing in conventional British universities. In this system, power is shared between a council, which is the executive governing body of the University, responsible for the overall management of the University's finance and physical plant; and a senate which, subject to the power reserved to the council, is the academic authority of the University. The system is in effect one in which the power of each of these bodies is subject to a series of checks and balances, designed to ensure that either body infringes the responsibilities of the other (Kaye and Rumble, 1981: p183); (Figure 2: Government Structure of the British Open University).

The executive head of the University is the Vice-Chancellor, who is assisted by four pro-vice-chancellors each with responsibility for a specific policy area. The University's organisational structure has developed in response to the function it has to undertake, and in relation to the geographical divide of the teaching and learning process between the centre and the regions, and the similar divide between regionally organised students support services and centralised student administration. Namely the University is structured around a central core of academic and administrative units based in Milton Keynes, and 13 regional offices with 260 local study centres, which are responsible for organising the local presentation of courses to their part-time students (Figure 3: Organisational Structure of the British Open University).

So, both distance teaching systems represent a new departure in the organisation and management due to their common features of separation of students and teachers,

the division of responsibilities and the integrated management needs of the complex systems from that of traditional universities.

They cater in the main for the needs of working adults reading for qualifications. However, authority in overall planning, policy making and programme provision in China's RTVUs rest with the educational authorities both at central and local levels rather than with the institutions. The whole system adopts a centralised planning and an associated five-tier administration for the operation and implementation of educational process, which is rather consistent with the political system of the country. They mainly focus on the provision of vocational and technical education at a diploma level and are centralised academically with unified curricular, teaching plans and syllabus, multimedia programmes, instructional materials, as well as the final examinations. The CRTVU relies on local RTVUs to coordinate and accomplish the educational transaction, while local RTVUs depend on the CRTVU for the provision of programmes.

The priority of the British Open University is to provide opportunities, at both undergraduate and postgraduate level, of higher education to all those who have been precluded from achieving their aims through existing institutions of higher education. Its binary governmental structure resembles that of the democratic political system, while its internal organisational structure shows a conventional hierarchy. Overall control and planning is vested in the University itself in terms of policy making, curricular development, enrolment and assessment. And the centralised teaching structure is accompanied by a well established local individualised tutorial system to better take care of the needs of individual students.

The centralisation and association of the Chinese system is to make sure that the social and economic needs are met, while the BOU structure is to be more responsive to the needs of the individual adult students.

FUNDING AND COST

Distance education systems can require considerable investment in courses and fixed overheads. If the average cost per student is to be brought down below that found in traditional institutions, then these costs must be spread over large numbers of students. Therefore factors which might influence the total cost of providing distance education

programmes may depend on the choice of media, the number of courses on offer, the level of support services, the quality of learning materials, the sophistication of management and administration as well as the size of student population.

China's Radio & Television Universities

The Budget for China's RTVUs comes from a variety of resources. The CRTVU is administered and funded by the State Education Commission with China Central Television (funded by the Ministry of Radio, Motion-pictures and Television) and China Education Television (funded by the SEdC) being responsible for the transmission costs, while the Ministry of Post and Telecommunication is responsible for the recurrent fees paid to hundreds of microwave relay stations and satellite communication services.

PRTVUs are under the auspicies of provincial governments and their branch schools under the prefectural or civic governments. These two tiers get their financial support from their parallel local governments. District/county work stations are funded by the educational bureaux of local governments, and work stations affiliated to industries, companies and enterprises are financially supported by their respective systems.

TV classes run by work units get financial support from factories, shops, government bureaux which send students to be trained at the RTVUs, and TV classes run by RTVUs at various levels to cater for secondary school graduates are aided by governments at their corresponding levels. TV classes composed of young school leavers can be financially supported by certain work units which will employ RTVU graduates from these classes.

However, government funding is allocated in proportion to the number of teaching and support staff in the RTVUs rather than to student enrolment because the latter fluctuates from year to year and can not be used to gauge the annual base budget. Tuition fees are paid by either work units or students, therefore, the higher the student enrolment, the greater the amount of tuition income for universities. Such income helps support the operating costs and it can also be used for hiring part-time tutors.

A sample evaluation project on the educational quality of RTVU graduates and cost-effectiveness conducted within the network began in 1989 and was implemented in 1991. It reveals that the average cost per RTVU degree graduate equals 43-51% of that conventional colleges. It also indicates that 59% of the total budget of RTVUs comes

from official sources, of which the finance from the Central Government only covers 7.4% (4.4% of the total) compared to 92.4% (54.6% of the total) from the local governments at different levels. Students themselves cover 4.3% of the total and the rest (36.7% of the total) is paid by tuition fees from work units, industries, companies, or public services (Ding, 1994). It is a pity that this calculation failed to mention the capital investment of $50 million spent by the Central Government for the establishment of the system, and the $45 million of World Bank loan for production equipment purchasing in 1983. Furthermore, the loss of production since almost all the adult students of RTVUs before 1986 were released from work for their paid full-time study. We may expect that the high fixed cost might be spread over a large a large student population over the years to reap the cost advantage like other distance teaching universities, however, the variable costs for compulsory face-to-face tutorials in China's RTVUs fail to bring down the average cost per student.

The cost structure of China's RTVUs shows the effort of balance keeping between cost and quality (Rumble, 1993). The fixed costs for course production account for only 16% of the total budget compared to that of one third in the BOU, while the variable costs for face-to-face sessions represent 52% compared to only 21% of the total in the BOU. The relatively low fixed costs is due to the recording of lectures of conventional education, using of existing textbooks, transmitting programmes through existing broadcasting stations at a low marginal cost. However, compulsory face-to-face tutorials have to be supplies to remedy the low quality of the instructional materials so that the quality of education can be maintained and the high drop-out rate can be prevented. Therefore, it is no surprise that the variable costs of China's RTVUs are moving towards the standards of 70% in traditional campus education due to its large student population. We have to make the choice: either high fixed costs and low variable costs, or low fixed costs and high variable costs. The difference is only the shift of financial burdens: either from the Central Government to the local governments, or from the local governments to the Central Government.

The British Open University

In Britain the Government has made a number of changes of the funding of higher education in recent years, in an attempt to increase institutions' responsiveness to student demand, and to encourage them to take in additional students at marginal cost.

Government funds to support teaching in higher education used to flow through two channels: the Universities Funding Council and the Polytechnics and Colleges Funding Council, while tuition fees are paid through the local authorities to institutions on behalf of full-time students who receive a mandatory award. With the issuance of the Further Education and Higher Education Act in 1992, both universities and polytechnics were to be financed by a single Higher Education Funding Council. They compete against one another for funds at the margin. Each institution contracts to provide an agreed number of places in each subject area for an agreed sum of money. The Government has recently decided to increase significantly the level of the tuition fee, and the ratio of grant income to fee income was changed from 10:1 to 3:1 across all institutions of higher education (DES/OU Review, 1991)

However, before 1992 the BOU was directly funded by the Department of Education and Science through a cash limited block grant, which allowed the BOU a good deal of discretion to determine the nature and balance of its activities. The cash-limited block grant provided few incentives to the BOU to increase student numbers and there was no public funding of its tuition fee, so the BOU had difficulties in raising fee levels.

Starting from 1992, the practice and development witnesses the convergence of the BOU into the mainstream higher education in terms of sharing unified funding system and standardised curricula with other traditional universities and the BOU begins in direct competition with conventional universities. The annual budget of around 200 million Pounds, which covers about 68% of the cost of the undergraduate programme, is derived principally from the Central Government, with additional funds from student fees and from other public and private sources (Top Ten, 1995).

The BOU is characterised as an institution with high fixed costs and relatively low marginal costs. An analysis of the BOU's recurrent expenditure on the undergraduate programme in 1989 suggested that one-third of the costs was devoted to course development and production, while about 17% was spent on student support service. The presentation and distribution cost for the programme accounts for about 22% of the total (Table 2: Cost Structure of the British Open University). The cost to the public purse of a full-time equivalent student at the BOU in each discipline is just over half the average for other universities (Daniel, 1995).

To make some comparisons, about 60% of the budget for China's RTVUs is from governments at both central and local levels, however, the cost structure for the system is characterised by its low fixed costs and high variable costs, having much in common with that of conventional colleges and universities.

However, about 68% of the BOU budget comes from the Central Government, and the University is characterised by its high fixed costs for development and production of distance learning courses and materials and relatively lower variable costs for distribution and presentation of programmes to students. The high fixed costs need to be brought down by spreading over a large number of students, the dilemma is that the more students there are, the greater expenditure on student support service will be. Otherwise the high drop-out rate caused will also undermine the cost advantage of the system.

The rapidly changing needs of societies and individuals can also present problems to both systems. When speed of changes in curriculum required by new skills, new knowledge and new ideas increases, more programmes are developed along with the revision of the old ones. Each new course represents an investment in course materials. The more courses on offer, the greater the total investment and the greater the cost of maintaining them or eventually replacing them with new versions. All these result in an increase in the average cost per student (graduate). Moreover, as more courses added to the curriculum, the number of students spread over each course will decline, which will also lead to an increase in the average cost per student.

We all know that distance education claims cost advantage by producing materials which can be used again and again with different student groups at limited additional cost. If programmes have to be changed regularly to avoid obsolescence, they will never achieve the economies of scale which are their major advantage. Therefore, the quantity, quality and efficiency of distance education all present implications for the cost of providing distance educational programmes. Before we embark on any of the new adventures, careful consideration must be given in the light of students numbers to the cost implications of media and number of courses.

SUMMARY

China, the largest developing country with restricted financial, physical and human resources, is fully committed to the construction of four modernisations after the end of the Cultural Revolution, however, the shortage of skilled and semi-skilled manpower became an obstacle to the advancement of the country. Distance education, with its advantage of expanding access on a large scale at a relatively lower cost, was the only alternative way of solving the problem.

Therefore, the purpose of setting up China's RTVUs was for the training of needed technical and professional personnel for the social and economic development of the country, which reflected the idea of human capital theory. In order to produce the needed human resources on a large scale within a short time span, centralised overall planning and associated administration was required, together with the academic unification in terms of curricular development, teaching plans and syllabuses, multi-media programmes, instructional materials as well as the final examination, to ensure the operation and implementation of educational transaction. The cost structure of the system resembles much the one of conventional colleges and universities due to its heavy dependence on group tuition.

However, for a developed country like Britain, the establishment of the BOU was to provide opportunities to adults who have not received higher education and fuller professional training and qualifications, and who would like to study while continuing to work. Therefore the underpinning ideas for the operation and development of the BOU reside with democracy, egalitarianism and lifelong learning.

As an independent and autonomous institution established by Royal Charter, the BOU was authorised to make its own policies and decision as well as to confer its own degrees. The centralised administration and course production, with an individualised local tutorial system, cater for the needs of its distance adult students from all walks of life around the country (Table 2: Differences of China's RTVUs and the BOU).

PART TWO: PROGRAMMES, LEARNERS, TEACHING AND LEARNING

In this part, comparative analysis will be made about the programmes provision, social and educational background of learners, and the approaches of teaching and learning in China's RTVUs and the BOU. Differences in the practice of these two distance teaching systems will then be specified.

PROGRAMMES

Based on the mission, aims and objectives of a distance teaching institution, programmes are planned and prepared for the perceived target student population, reflecting the underlying philosophies that brought them into being and determine in part the kinds of students which they serve.

China's Radio & Television Universities

Based on needs assessment provided by the education commissions, economic planning commissions, labour force department, personnel development divisions and other related organisations, China's RTVUs at both central and provincial levels decide academic fields, levels and formats of the programmes to be offered. With the approval from the education commissions about their provision, they start drawing up teaching syllabuses and plans as guidelines for the development of courses.

Before 1986 the CRTVU offered national unified programmes with very limited flexibility. All programmes had to be approved by the Ministry of Education and be prepared by the CRTVU under the policy of "Unified planning, student recruitment, syllabuses, course materials, radio/TV programmes, assessment and examinations". The situation has changed a great deal as a result of decentralisation policy for economic and social development in 1986. In recent years, the system of 60-40% split between the CRTVU and PRTVUs on the provision of courses allows local RTVUs some autonomy in offering and producing courses to suit the needs of local social and economic development.

China's RTVUs offer both degree and non-degree education programmes, which run on the central, provincial and local levels, to inservice adult students and middle school leavers. The goal of degree programmes is for the training of qualified work

force, while non-degree programmes are mostly aimed at training, upgrading and updating of on-the-job adults and future employees in the form of short-term courses.

Degree education is mainly made up of three- and two-year programmes, with the first designed for full-time students majoring in engineering and technology fields, and the second for full-time students of humanities and social sciences. Part-time students majoring in these two programmes are expected to finish the course from three to six years. The standard expected is that of three-year diploma rather than four year bachelor degree. Starting from the fall of 1996 BA, BS programmes in the fields of English education, law and computer science were offered to working adults with an associate degree who want to obtain a bachelor's degree in their three year part-time study.

Although China's RTVUs provide a large range of courses from which student can choose freely, there is little scope within a course for student choice. Once enrolled on a course, the student is programmed into a tight study scheme. A total of over 76 credits are required for a two-year diploma, while over 114 credits are required for a three-year diploma. As is the tradition in both formal and non-formal higher education sectors in China, there is no credit transfer system between China's RTVUs and other institutions of higher learning.

Degree programmes started with three-year courses of technical and engineering course for training skilled workforce for which there was a pressing demand. Along with the rapid development of social and economic changes, new programmes of other subject areas kept rolling in. The faculty of science and technology was followed by the introduction of humanities and the economics and management. In 1986 secondary vocational and technical education programme for qualification purpose were provided for junior middle school leavers. Also in this same year non-degree continuing education courses were offered for those who had already received a tertiary degree but eager to improve their professional skills and knowledge. And in 1990, Liaoyuan Schools affiliated to the CRTVU began to provide practical skill training courses for local farmers and peasants through China's satellite TV system. The year 1996 saw the provision of bachelor degree programmes to working adults who study at a part-time base (Table 3: Faculties Provided by the CRTVU).

The latest statistics shows that the degree education sector of China's RTVUs has provided 21 subject areas of 350 courses in five fields with a total student population of

more than 2.54 million, and the total number of RTVU graduates of both degree and non-degree programmes from 1981 to 1994 has reached over 5.4 millions (Wei & Tong, 1993).

The British Open University

The BOU was established as an independent and autonomous institution authorised to confer its own degrees by a Royal Charter. Therefore, it enjoys the autonomy in deciding programme provisions for its students.

The BOU's activities can best be considered in terms of a number of teaching programmes: they are the undergraduate programme, the continuing education programme, and the higher degree programme.

The undergraduate programme was the first to develop. It leads to a general degree recognised as equivalent to a degree from any other British university. Undergraduates have a choice of more than 130 courses and many of them are vocational and technical. Each course rates as either a full or half credit, depending on the amount of work involved. Six credits qualify a student for an ordinary degree and eight credits for an hours degree. Students can choose the courses they do to make a degree. No formal educational qualifications are required for admission to this programme which is based on a first come and first served policy. The only requirements are that applicants must be at least 18 years of age and residents in the UK.

With the undergraduate programme firmly established, the BOU turned its energies to the development of its contribution to continuing education in which the aim is to met the needs of a changing society. The continuing education programme is designed for adults who wish to extend their knowledge of their own career or to acquire knowledge of a new field without embarking on a full degree programme. The result has been a rapidly growing range of materials for individual or in-house training programmes. Some are complete self-tuition packs, and others are run in the same way as undergraduate courses, but the trend is towards increasing collaboration with a wide variety of groups and bodies responsible for different aspects of training and retraining in terms of six sectors of activities: 1) The Open Business School; 2) Scientific and Technological Updating; 3) Health and Social Welfare; 4) Professional Development in Education; 5) Community Education; and 6) Personal and Cultural Education (Smith, 1988: p240-242).

The BOU is no different from any other university in the emphasis and importance it places on research and higher degree studies. It offers both full-time and part-time opportunities for research-based higher degrees and taught higher degrees. Unlike the undergraduate programme, for higher degrees the university insists on the same minimum academic entrance qualification as other universities.

Credits for programmes obtained can be accumulated within a ten year time span and can be transferred with other colleges and universities. Courses of different programmes can be used changeably based on the needs of students (Figure 4: Programmes provision of the BOU).

So, in China the decision on provision of programmes resides not with the RTVUs but with the educational authorities at central, provincial and local levels on the basis of manpower planning since the personal choice of students are by definition not choices made in the national or local interest. In order to prevent the fact that the situation has changed by the time the response made by China's RTVUs takes effect, the forecast of demand for economy was done at both central and local levels, and the 60-40% policy for course provision between the CRTVU and PRTVUs also makes the system relatively responsive to the needs of the country. This is particularly so with the local RTVUs, which have made massive switches in programmes to respond to what the governments have seen as the current needs of the economy by adopting ready made courses from conventional two- or three-year colleges, and by providing face-to-face instruction in RTVU campuses with less consideration of cost-efficiency of the whole system.

Therefore, the programmes offered by China's RTVUs are more career-oriented and they concentrate on vocational and technical education based on the needs of the society rather than that of the individuals. Degree programmes are provided at diploma level and once enrolled, students are programmed into a tight study scheme so that the needed manpower can be produced in a short time span. However, non-degree education are meant for the raising of scientific and cultural level of the whole nation.

Compared with China's RTVUs, the BOU mainly caters for the needs of individual students. It has the right to decide the programme provision with prime concern on the academic quality. Therefore, the programmes provided by the BOU are more academic oriented like any other British conventional universities and place emphasis on raising the educational level of students in both academic areas of arts and

science with indirect relationship to employment. The BOU as a whole has changed in some very important ways. It has grown from a university with one principle program of study, -the undergraduate program for the undergraduate degree-, to a university with a whole range of different programmes of study, with a particular commitment now to continuing education (Tait, 1994).

LEARNERS

China's Radio & Television Universities

China's RTVUs degree students population mainly comprises working adults, both part-time and work-release full-time, and fresh middle school graduates studying full time, of which adult learners accounted for about 70% of the total student population. The percentage of the working adults who have been granted paid study leave by their employers represents only 16% of the target group compared to 97% before the year 1986. As for those who are involved in non-degree education, almost all of them are part-time working adults.

According to the latest tracer survey in 1991 on graduates of degree education, male students accounted for 72% of the total, while female students were 28%, and the minority students represented only 2.3% of the total student population. The average age of students was 24 years old and the oldest student enrolled was 53 years of age while the youngest was only 15.

Students who are involved in degree programmes are required to sit either national entrance examination for adults, or national uniform entrance examination for conventional colleges and universities. They will be admitted to RTVUs after they reach the score lines set up by the local education authorities together with the local RTVUs (subject to quotas for reference based on the manpower planning after 1986). (Table 4: Admission, Graduation and Enrolment of Diploma Students of the RTVUs) The majors or specialties chosen by working adults should be relevant to their professions and work units, while students of middle school graduates are not confined to this rule.

In 1982 a new type of students called "contract student" began to be admitted into RTVUs. The target group for contract students were all senior higher school graduates who had taken the entrance examination for conventional colleges and universities but failed to reach the pass marks set. These students were contracted to

local employers to whom they go after graduation. It was the work places that entrusted the RTVUs with the training of the specialised labour force they needed with provision of training fees.

RTVU students who pass all examinations and obtain set credits required for the degree programme are awarded diplomas which will be confirmed and stamped by the provincial educational authorities. As designated in the government documentation concerning the status of RTVU degree students issued jointly in 1982 by the Ministry of Education, the Ministry of Labour and Personnel, RTVU qualification equals that of conventional two or three year vocational and technical colleges, and RTVU graduates enjoy same pay as those graduates from specialised collages and institutions, on the condition that graduates from working adults go back to their original work units. For graduates coming from middle schools they will enjoy the same social status once they are employed.

The British Open University

The BOU was committed from its foundation to changing the nature of access as well as increasing the number of mature and part-time students. It admits and enrols students at home and in Europe, and all of them are adults above 18 years old.

The BOU's open access policy means that it attracts students with a wide range of previous education qualifications. New entrants in recent years may be divided equally between those with qualifications of below A-level standard; of A-level or equivalent standard; and of above A-level standard. With some exception of research students, all students of the BOU are studying part-time, of which about 70 percent are in employment (DES/OU Review, 1991).

The University attracts undergraduates from all social groups; the proportion of graduates from middle class has declined from about 90% in the 1970s to about 70% in more recent years and there has been an increase in the proportion of graduates from working class fathers. Half the undergraduates at the BOU are women, and about 5% of the BOU undergraduates are non-white. A further characteristic of the BOU students is that about three-quarters of undergraduates receive no help with tuition fees from LEAs or employers and they accept a major personal responsibility for financing their study.

Nearly 90% of the BOU's undergraduates entered the University when they were aged over 25, which suggest that the University caters for almost as many mature

students as the rest of the higher education system put together. It also provides opportunities to large numbers of the disabled and people in other special groups like armed forces, prisoners, and seamen, for whom undergraduate studies would otherwise be impractical.

The latest statistics shows that the BOU produces twice as many part-time undergraduates places as all other institutions combined, dominating in the national provision of opportunities for part-time undergraduate studies. It also plays a highly significant part in the provision for degree level studies as a whole; of the 548, 000 students registered as undergraduates in the academic year 1988-1989, 13% were studying with the BOU (DES/OU Review, 1991).

So, what comparisons can we make between China's RTVUs and the BOU? In China's RTVUs, students are made up of mainly working adults and middle school graduates. Since the educational background of applicants is diversified which will cause problem for the quick production of needed manpower, entrance examinations are required of all applicants reading for degrees. With the exception of those who pay for the education themselves, the courses RTVU students choose should be relevant to their professions or future work places with permission from their employers.

There are still about 45% of the students at school who are studying full time and they are mostly urban-based employees with male students dominating the RTVU student population. However, compared with the BOU students, the average age of 24 reveals that they are much younger. A further characteristic of RTVU students is that the majority of them are financed by their employers and the qualification obtained will be closely associated with the change of social status, the promotion, and the increased salary.

In the BOU, with a few exception of research students, all the BOU students are studying part time, with no entry qualifications required of students who are participating in undergraduate programme. Student population is so diverse that it includes housewives, armed forces, teachers, managers, technical personnel, prisoners, to people from various of trades and professions (Table 5: The Occupations of Registered Students of the BOU).

Students are free to choose whatever courses they want and they are more oriented towards self development than achieving material benefit from their studies, though most of the graduates do benefit from better job, pay or promotion after they

finish their courses. The majority of the BOU students pay for their own education with no paid study leave from their employers.

TEACHING AND LEARNING

Teaching and learning in distance education are based on the two constituent elements described: a pre-produced course and non-contiguous communication between students and the supporting organisation with its tutors and counsellors. Namely, the course subsystem and the student subsystem. Modern technology has made a number of useful developments of both elements possible (Holmberg, 1995: p6).

China's Radio & Television Universities

In China course subsystem is mainly controlled by the CRTVU in terms of course design, development, production, distribution, delivery and assessment. After the provision of programmes has been approved by the State Education Commission, courses are prepared by course teams composed of the RTVU teachers, the media personnel and the academics from conventional universities. The whole course development process takes from three to five years to finish depending on the curriculum and expertise of the team.

The RTVU courses are multimedia, consisting of radio and television broadcasting, audio and visual recordings and print materials. Radio and TV programmes, which account for 10-30% of the course, are built around the printed materials. They are, to a large extent, direct recording of conventional university classroom lectures by famous professors as presenters, and are produced by the Central People's Radio Station and the Central China Television Station before 1983. Recently the majority of them are produced by the programme production centres of both CRTVU and PRTVUs and then transmitted nation-wide or locally through national network of TV stations and local network of radio stations via microwave and communications satellite devices usually in daytime at weekdays (Table 6: Transmission of RTVUs Programmes by Radio & TV). The radio and TV programmes usually last forty minutes and fifty minutes respectively. Audio and visual programmes are usually the duplication of radio and TV broadcasting.

Along with radio and television materials there is also text production, of which the majority is done by the CRTVU. There are three types of text: course books,

reference books and study guides. Coursebooks are more or less the same as those used in conventional colleges and universities. They are mainly knowledge-based, comprising about 15 units in logical order, each requiring one week of study. Study guides are compiled to accompany the texts and TV programmes. They outline aims and objectives, contain notes and explanation of difficult points, and provide answers to exercises in the coursebooks. Reference books are usually developed for the tutors with clarification and elaboration of difficult points in the coursebooks as well as teaching methodologies for the tutorials. Coursebooks are usually printed by external printing houses and sold through national chain bookstores, while reference books and study guides are mainly printed by CRTVU and PRTVU internal print shops and distributed through the network of their distribution service centres.

As for the student subsystem, registered students, whether they are working adults or middle school graduates, are taken care of by the four tiers below the CRTVU. At present there are 22 provincial RTVUs, 4 autonomous regional RTVUs, 3 independent municipal ones and 14 in newly founded special cities. Their branch schools account for 654, with 1,550 work stations. More than 10,000 RTVU classes are located at provincial, civic and county levels. Students are organised into RTVU classes with a class manager in charge. The number of students in one class generally varies between 20 to 40 depending on majors and specialties so that teaching and learning activities can be easily arranged and organised.

The main form of student learning activity is group instruction. Students who are studying full time are expected to come to class for listening/watching radio/TV programmes, attending local lectures for local courses and participating in face-to-face tutorials. Radio and TV programmes, as well as local lectures, are focused on transmission and delivery of new knowledge, while face-to-face tutorial is centred on students' comprehension and consolidation of the knowledge obtained through skills training and problem solving. The ratio between radio/TV programmes and face-to-face tutorials is 2 to 1, with exceptions of 1 to 1, or 3 to 1 in certain courses.

A typical tutorial class is usually organised in groups of about 30 students, and it is arranged after about four hours of radio or TV programmes, or self study. Each tutorial class lasts fifty minutes, with focus on further clarification and additional explanation of difficult points in the studies. Peer and group work will be organised and in-class assignments will be done for the reinforcement of the knowledge gained.

Sometimes tutorial is held in factories, laboratories or sound labs, depending on the course taken.

At the end of each term nation-wide examinations will be held at fixed dates, and for those who pass and finish the course certificates will be issued with equal academic footing as those graduates from two- or three-year colleges and institutions.

The British Open University

The first stage of the course subsystem in the British Open University comprises the development of curriculum objectives for each course, the design and development of multimedia materials, and the development or specification of teaching, learning and assessment instruments. The second stage is that of course production while the third is concerned with course delivery.

Course development and production is done at headquarters and "presentation", that is student support, is based in regional centres. The key organisational structure for the production of course materials is the course teams which consist of three groups of staff: academics, educational technologists and the BBC production staff. The printed main text is the principal teaching medium in most BOU undergraduate and associate courses, with printed supplementary materials which may consist of broadcast notes to accompany 5% of the integrated radio and television programmes. They are closely integrated with additional reading materials, with assignments, and with radio and TV programmes to form units of work, each requiring one week of study.

The printed course materials are printed by the external commercial printers, with the exception of supplementary materials, and then stored and despatched to students in regular mailings from the Correspondence Services Division. For students of science and technology on some courses, kits are supplied to enable them to undertake the practical application of theoretical principles. Attendance at one-week residential school is compulsory for OU students on foundation courses and some high-level courses and it provides opportunities for learning such as lectures, seminars, field work, laboratory work and informal discussions.

However, the student subsystem is concerned with admission of students, their registration for courses and the collection of fees, their allocation to region and local study centres, tutors, and summer school, the arrangements for examinations, and their certification. Responsibility for the student subsystem is shared between the central

administration and the region. The BOU has divided the UK into 13 regions located in major cities to provide a tutorial and counselling service to its students. Regional contact with students is maintained by more than 7,000 part-time tutor counsellors, course tutors and associate student counsellors. Over 260 study centres have been established to provide meeting places and facilities of various kinds, including rooms for watching television programmes and listening to radio programmes, and access to libraries (Harry & Rumble, 1982: p180).

In the first year of study with the BOU the undergraduate student is allocated a tutor-counsellor who will tutor one foundation course and will act as counsellor not only in the first year but through the student's university career. Tutorials are intended to be remedial and are not compulsory. Post-foundation counselling is maintained through individual interviews at the study centre, by post and telephone, and on occasion by home visits. Associate students are allocated to a course tutor for each course taken, and have access to a counsellor. A typical face-to-face session in the BOU is usually organised in groups of about 20 students with peer work and group discussion dominating the process of tutoring. Sometimes outsiders find it difficult to tell who the tutor is and the role of the tutor is a facilitator, mediator, and supporter rather than a lecturer.

The comparisons of the process of teaching and learning between China's RTVUs and the BOU show that distance education is a process to be implemented, both elements of teaching and learning have to be taken into consideration to guarantee the successful instruction based on the characteristics of the separation of teacher and student, variety of student educational background, pre-production of course materials, complication of administration.

China's RTVUs are characterised by their heavy use of the big medium TV for delivery of instruction as well as the compulsory group tuition for dialogue and interaction between tutors and students. The form of lectures dominates both radio/TV programmes and group tuition with a teacher-centred approach. As Kaye and Rumble indicated before:

> The more complex distance learning systems tend to adopt group-oriented pacing mechanisms such as fixed dates for course enrolment, broadcasting, assignment returns and tutorials. This is only a matter of administrative convenience and economies, but is practically inevitable if broadcasting is

used, and if periodic continuous assessment work is to count towards certification" (Kaye and Rumble, 1981: p65).

Compared with China's RTVUs, the BOU is characterised by its centralised course production and its individualised local tutorial system. The teaching methodology is student-centred and self study is the main form of learning. Students are provided with easy access to individual tutorial from local tutors and counsellor, as well as personal relationship with tutors and counsellors. As Sewart argues that the BOU's student-centred approach is realised through its part-time staff and local and regional support systems, and that its success as an institution rests upon the interrelationship of the package of materials with the students through the agency of the tuition and counselling functions peculiar to the BOU (Sewart, 1983: p53); (Table 7: Differences of China's RTVUs and the BOU).

SUMMARY

Both China's RTVUs and the BOU claim themselves as the open distance teaching universities, however, the comparisons between the activities they are engaged in reveal that distance education means different things in these two countries.

China's RTVUs are characterised by their centralisation in terms of overall planning and policy outlines. Moreover, curricular, syllabuses, academic calendar, admission, enrolment and graduate placement system are all nationally unified. The governmental structure in China's RTVUs is five-tiered, paralleling that of country's political system for the administration and implementation of the whole project.

Unlike the BOU, programmes provided at China's RTVUs are mainly focused on vocational and technical education at diploma level, aiming at the training, upgrading and updating of the working adults and middle school graduates. Curriculum development and teaching methodologies follow the pattern of ordinary higher education. Conventional classroom lectures are brought into the RTVU campuses via radio and TV, with a teacher-centred approach dominating the radio/TV programmes, local courses as well as face-to-face tutorials. The goal of the system is clear and simple, to serve the needs of society rather than that of the individual student on the basis of manpower planning, which reflects the idea of human capital investment.

The British Open University, established by a Royal Charter as an autonomous university to confer its own degrees, is authorised to make its own policies and decisions.

The philosophy underpinning the establishment of the institution rests with the ideas of democracy, egalitarianism and lifelong learning, therefore, every measure is taken to make sure that the needs of the individual student are met.

The BOU provides a variety of programmes, ranging from diploma, undergraduate, post-graduate to non-degree education, aiming at serving the needs of individual students. The process of teaching and learning in the BOU is characterised by its centralised management and course production subsystem, accompanied by a responsive and supportive individualised local tutorial system. The BOU students are all adults with a diverse social and educational background. They are free to choose the courses and pace their own learning, and almost all of them study part time.

The BOU, a dedicated distance teaching university, fits well into the category of an autonomous model of distance education. However, China's RTVUs, modelled after the BOU, do not fit in well with any of the categories defined by the western distance education theory builders. But why do these two distance education systems operate so differently? The Third and the Fourth Parts will try to find out the answer to this question by exploring the higher education systems in these two countries to which distance education belongs; by clarifying the relationship between higher education and political, social and economic development; and by defining the nature and role of these two systems in the different contexts.

PART THREE: THE NATURE AND ROLE OF CHINA'S RTVUS

Both the BOU and China's RTVUs belong to the sphere of higher education and a close look at the higher education systems in these two countries will certainly help us gain better insight into the nature and role of distance higher education. Hopefully it will provide us with the answer as to why the two distance higher education systems operate the way they do.

THE GROWTH AND DEVELOPMENT OF HIGHER EDUCATION IN CHINA

Higher education system in China consists of two sectors, one is the formal education sector, and the other is the non-formal sector. The main difference between these two sectors is their target group. For the former, it mainly admits students of senior high school graduates, whereas the later enrols mainly working adults from all walks of life, though it started to accept high school leavers from the 1980s. However, institutions in both sectors are granted the permission by the governments at both central and local levels to provide degree and non-degree programmes and to issue certificates, diplomas and degrees to their graduates.

According to the latest statistics, there are now 1080 higher education institutions in the formal higher education sector made up of key comprehensive universities, four-year universities and two- and three-year colleges and institutions. And the higher education institutions in the non-formal sector accounts for 1172, which are composed of radio and TV universities, workers' universities, farmers' universities, administrative cadres training colleges, colleges of education, correspondence education colleges, and etc. It is appropriate to refer to them as colleges because of their career-oriented education of relatively lower academic standards. These colleges are usually regarded as institutions of adult higher education and radio and TV universities are considered as the mainstream in China's adult higher education.

Chinese higher education dates back to the period of the Shang Dynasty (1523-1027 B.C.) when the foundations of Chinese culture had already been laid. At that time schools were associated with the government bodies to train officials and warriors. Therefore the qualities of loyalty, submission and obedience of the officials from higher

education were put above everything else. The main subjects taught were the six Arts: Rites, Music, Archery, Chariot-riding, History and Mathematics.

With the disintegration of the slave system, the government-run system began to be replaced by private bodies of higher education when China entered into a period of feudalism lasting for over 2000 years. Confucian philosophy, which stated that there was no class distinction in education, became dominant. Based on this idea, students were selected from all classes of society and went forth to serve as civil servants and teachers after they completed their studies. The curriculum was oriented towards four aspects: literature, behaviour, loyalty and tact which mainly contained principles of government and the administration of society as well as maxims of personal conduct, with lectures as the dominating mode of teaching and learning. However, it is this Confucian idea of educational equality that provided the rationale for the imperial unified examination system administered by the government for selecting and recruiting officials on the basis of individual merit from Han Dynasty (202 B.C.-9 A.D.). Once selected, the high social status as well as ample income would come hand in hand to those new upper and middle classes.

These ideas and practices of Confucius, coupled with his pedagogical thinking, laid the foundation for feudal higher education in China for over a period of 2000 years. Moreover, the examination system actually played a major role of widening the gap between the poor and the rich since only a minority of wealthy and powerful landowners and aristocrats could afford the higher education. It is also this examination system which has great implications on the role of higher education, curricular and the methodologies of teaching and learning for the successive dynasties and states to come, even on higher education in modern China today.

The defeat of China by westerners in Opium War in 1842 led to a period of a semi-feudal and semi-colonial regime for over one hundred years. Higher education began to undertake the task of building up China through education and of saving China from falling prey to foreign aggression and subjugation. The forms of higher education in this period can be classified into three categories: the existing traditional feudal higher education, the copy of western liberal higher education by state-owned institutions and the missionary schools of higher learning sponsored and managed by foreign missionaries mainly from America and Britain (Du, 1992: p2). Whether public or private, institutions of higher learning were under the auspices of the government in forms of unified

entrance examination and curriculum structure. Chinese learning in this period was promoted together with science and technology courses officially added to the curriculum for future utilisation. Loyalty to the emperor and respect to the Confucius were no longer the principles of higher education, what instead was the emphasis on the production of high-level human resources of various kinds based on the needs of the country. There was no more relationship between qualifications and high ranking jobs, reflecting a mixture of liberal education systems in the western countries of that time.

Another form of higher education in China which is worth mentioning, and which has great implications for China's Radio and TV Universities, was the institutions set up by the Communist Party during the Anti-Japanese War and the Chinese Civil War in the 1930s and 1940s in several provinces. "Though ill equipped, irregular in length of study and restricted in course offerings, they trained a large of contingent of officials and technical personnel for the practical purposes and become models for the educational development throughout the late 1950s and 1966-1976" (Du, 1992: p5).

The founding of the People's Republic of China in 1949 marked a turning point for higher education system in terms of centralised management, structures, enrolment, as well as curriculum, with the Ministry of Education (later State Education Commission in 1986) as the direct supervisor of the system. And the purpose of higher education was to:

> produce human resources with high level of cultural, and scientific and technological knowledge to serve the proletariat, to serve the people, to serve the socialist construction and to serve the modernisations of industry, agriculture, national defence and science and technology of the country (Cai, 1986: p167)

under the principle of relating theory to productive work.

The development of higher education in new China can be divided into five periods. The first period was from 1949 to 1956, during which all institutions of higher learning were made state-owned, coupled with an extensive restructuring of the existing 205 institutions of higher education, the centralisation and unification of the administration, admission, enrolment, and graduation of the whole higher education system under the leadership of the Ministry of Education, mainly a copy of the Soviet model, with a total number of 227 by the end of 1956.

The second period was from 1957 to 1966, the time when China started breaking away from the Soviet Union and formulated new educational guidelines to ensure that

higher education serve the proletarian politics and be combined with productive labour, actually a reintroduction of the model in the 1930s and 1940s. The total number of institutions of higher learning had amounted to over 1300.

The third period was from 1966 to 1976 when the Cultural Revolution broke out, a time of chaos and devastation for the system of higher education in China in terms of suspension of enrolment, poor quality of graduates as well as disruption of academic and scholarly exchanges with the outside world. The number of institutions of higher education had dropped to over three hundred.

The fourth period was from 1976 to 1985, which witnessed the recovery, reorganisation and development of higher education on a large scale in terms of the reintroduction of enrolment system, the establishment of degree system, the decentralisation of administration, the rapid development of adult higher education, and the recovery of exchange programmes abroad due to the dramatic changes in the social, political and economic development of the country when post-Mao government began to direct its goal of national development towards the realisation of four modernisations. And in 1985 the number of higher education institutions in both formal and non-formal sectors had reached 2232.

And the fifth period is from 1986 to the present, a period of readjustment with priority on quality rather than on quantity. In order to better meet the changes in social, political and economic development, the State Education Commission, which was decreed as the supreme administrative authority for the education system with responsibilities to formulate overall policies and coordinate efforts of different departments of education, replaced the Ministry of Education. More autonomy was give to the local governments and institutions, and the total number of institutions of higher learning has amounted to 2252.

Throughout the history and development of higher education in China, we can see that it is always undergoing changes and transformation under the influences of political, social and economic situations.

> The position that emerges historically clearly places education in a dynamic relationship with China society by providing training functions, value orientation, and social change activities. Yet, this system operated within boundaries and was never seen as an institution that could seriously challenge the status quo (Hawkins, 1983: p6).

PHILOSOPHIES UNDERPINNING THE PRACTICE OF HIGHER EDUCATION

Three schools of thought which have influenced the practice and development of China's higher education are Confucianism, Mao Zedong's socialism, and western liberalism. Each of them emerged, developed, or declined along with the change of political, social, and economic situation, and in the present higher education system, however, the mixture of the three can be seen in the activities of higher education in China.

The Confucian idea of educational equity came from his belief in the natural goodness of man. When this idea became dominant in feudal societies, Chinese thinkers all believed in the efficacy of education. Therefore, the goal of education was to cultivate and develop human nature so that virtue and wisdom and ultimately moral perfection would be attained. Once reaching moral perfection, a man would be in harmony with his fellow human beings and become capable of regulating worldly affairs (Du, 1992: p2). Thus, moral education about human society and political attitudes was the core of higher education in terms of loyalty, modesty, virtue, rationale and sacrifice, which were taught to educate and train people for the stability of the society. Individual achievements and personal development should be made subject to the one you obey and be held up or developed for the good of society. Therefore, the purpose of higher education was to produce beauracrats to keep social stability for the perpetuation of the ruling classes.

The content for higher learning usually started with rote learning of poems to stimulate feelings and to nurture wills, and the indoctrination of moral education consisting of politics, morals and language. Literature for social behaviour would follow. Therefore, the method of teaching was focused on teaching rather than learning by full time private teachers who organised their students in small groups and taught them at private homes.

> The Confucian period of traditional education exemplified the elite nature of education in its selection and ideological preparation of future governing elites. Theory ruled supreme over application as there was a general disdain for manual labour and natural science. Up until the time of the first revolutionary activities of the early 1900s, the traditional educational system remained an unchallenged mechanism for reproducing the stratified semi feudalistic society characteristic of ancient China (Collette, 1984: p135).

Western liberal education has gained little philosophical ground in Chinese higher education because its liberal ideas can not win the favour from the politicians and its individualism runs contrary to the traditional Chinese thinking of the academics. As the West and Japan began to threaten the centuries old internal solidarity of the Chinese scholar class at the end of 18th century and the beginning of the 19th century, it became apparent that a revitalised higher education system more conductive to the needs of modernisation and social change was necessary to prevent China from falling prey to the foreign powers. The establishment of Republic of China after the Bourgeois Revolution in 1911 did call for democracy, human rights and self development, however this period was short-lived for only three years, and higher education in the whole semi-feudal and semi-colonial period was characteristic of the experiments with different forms of foreign higher education structures and curricular by Chinese intellectuals trained abroad. However, the penetration of foreign educational ideas into Chinese traditional thinking was nevertheless inevitable.

Political and economic situations, coupled with the May Fourth Movement in 1919, influenced by the Russian Revolution, stimulated a tendency of anti-imperialism, and anti-feudalism by Chinese intellectuals. And this marked a starting point of their interest in Marxism and their later pursuit and ideal of setting up a socialist system in China.

Mao Zedong's idea on education, which was strongly influenced by Marxism, had its roots in the Soviet model during the Lenin period. His dialectical materialist philosophy, which saw man as central, both shaping and being shaped by his human and non-human environment, made him emphasise the integration with knowledge to work, and the moral political education. Like his Soviet Elder Brother, when the People's Republic of China was founded in 1949, China claimed itself to be a socialist country with proletariat in power. Since socialism was supposed to be an intermediate stage between capitalism and communism, remnants of capitalism were still surviving in the socialist stage although its structure was eradicated. Thus, for Mao Zedong, it was essential that there be strong centralised rule by a proletarian elite in order to prevent society from regressing again into capitalism. Therefore, the function of higher education in China should serve the proletariat politics and relate knowledge to productive work so as to pave the way for the establishment of a communist country.

Thus, China followed the suit of the Soviet Union, measures were taken to reform the existing higher education system in terms of Party's leadership, admission of students of worker and peasant origin, the linking of knowledge to work. At the same time, the second track of higher education, which was based on the model of the 1930s and 1940s, was set up for the training of proletariat elite to take over the leading role of government bodies. "This form of education was developed in conscious reaction to western educational systems which had been imposed on China for some decades with uneven success" (Hayhoe, 1984). The application of Mao's educational idea reached its prime in the Cultural Revolution, which proved itself a failure. After his death, his successors, however, reintroduced the model before the year 1966 without changing the overall principles for higher education, and called for its service to the construction of four modernisations.

Therefore, in China the essence of the three dominant schools of thought was focused on the services higher education can provide for the needs of the ruling power. And their influence on higher education in modern China can be seen in the practice of higher learning. From socialism, it obtained its policy making, overall planning and macro management; from liberalism, it adopted curricular, structures, and mode of administration; and from feudalism, it inherited the selective examination system, mode of teaching and learning, and the association of qualifications with white collar work. Thus, the present situation in higher education sees the American branches effectively grafted on a Soviet tree planted in a Chinese garden (Pepper, 1992: p128). Chinese are never keen on theories or ideas, and what they are really interested in is the practical values in the application of educational activities both at home and abroad. Just as Holmes and McLean pointed out:

> It seems likely that pragmatically they will incorporate into the curricula whatever they think will advance their intention to modernise their economy (Holmes and McLean, 1989: p235).

Thus, when China's RTVUs were set up based on the model of the OU, their roots were actually buried in the model of higher education of the 1930s and 1940s, which was typical of its practical service function for social and economic demands. However, by belonging to the non-formal sector of higher education system, China's RTVUs never cease pursuing their academic credibility and legitimation by keeping themselves conformed to the formal higher education sector, which is characterised by its

centralised policy making and overall planning, its vocationalism as well as its traditional way of group leaning.

NATURE AND ROLE OF CHINA'S RADIO & TELEVISION UNIVERSITIES

It is interesting to notice that seldom are academics of higher education willing to consider the non-formal sector as formal higher education in China although they admit that it is an important part of higher education, a supplement and continuation of formal schooling. Their attitudes, however, actually run deep and reflect the conflicts and compromise between these two sectors. Therefore in order to understand the position of distance higher education in which radio and TV universities were regarded as the mainstream, we have to understand the non-formal higher education sector by going back to its history and development in China.

Mention has been made before of this form of education which emerged with the establishment of the Communist Party before the founding of P.R. China in the 1930s and 1940s. The target group of this Communist higher education was aimed at Communist party members coming from workers and peasants background, the majority of whom had received a little or no formal education at all since traditional education system was elitist and restricted to the rich and powerful. Therefore this form of education was characteristic of its short-cycle and crash programmes for the purpose of training military man, cadres and personnel with practical and productive skills to serve the Anti-Japanese War and the Chinese Civil War. The textbooks consisted of mainly handouts and the methods adopted were independent study with occasional lectures and group discussions. As can be imagined, the emphasis was focused on political, practical and professional rather than book knowledge. Although the restricted financial, physical and human resources for this form of higher education could not guarantee the academic or professional attainments, but they had little impact on its priority of moral education about communist ideologies.

Shortly after the Communists took power in 1949, People's University was established in Beijing by the new government. It was open to people with worker-peasant origin without requirement of entry qualifications. The aims and objectives of the institution was to train cadres to manage and run governmental bodies for the new government. More institutions of this kind were put up, with the existing

institutions of higher learning encouraged to provide correspondence education, part-time education and evening classes for the training of workers and peasants.

However, in the late 1950s all these universities were brought into the mainstream of traditional higher education in terms of administration, structures, entry policy, curriculum as well as mode of teaching and learning. Mao Zedong's policy of linking knowledge to productive work, and the admission of students from workers' and peasants' families were neglected. In order to prevent the take-over by the "bourgeois intellectuals" in higher education institutions, a cultural revolution was launched to wipe out the revisionism, and to make higher education serve the needs of socialism based on Mao's idea that politics was the reflection of needs of economy and people. Only by serving proletariat politics could higher education serve economy and people(Cai, 1986: p179). When Mao's ideas prevailed, the transformation of both higher education sectors was seen, with orientation on moral political education and polytechnicalism, all based on the higher education model of the 1930s and 1940s.

The death of Mao brought this period to an end and his successors went towards another orientation, the promotion of economic development for the purpose of realising four modernisations. Rapid expansion in the formal sector and rapid development in the non-formal sector to produce both academic and professional personnel to meet the needs of the country were seen in the 1980s. As Hawkins indicated:

> It was clear that education should follow the politics and economies of the leading group in power at the time. The disagreement, as we shall see, was on the emphasis placed on education, whether primarily serving politics, or education, or primarily serving economies (Hawkins, 1983: p16).

Therefore, the origin of non-formal higher education sector gave people the impression that this is the gimmick of politics rather than need of education. The quick response to fill in the gap of vocational and technical education for the training needs of technical personnel for social and economic development proved itself more than an instrument of the government. Furthermore, its separate and independent national entrance examination system expects lower qualification of its applicants than that of the formal sector, and its curricular are more oriented towards career education rather than academic study and research. Thus, the close association with politics and economies brought it the contempt from the academics in the formal sector; the career oriented curricular led to their disdain; and moreover, the lower entry requirements of applicants gave rise to the impression that this sector was second rate.

China's radio and TV universities belong to the non-formal higher education sector. They were the product of government initiative and promotion in the late 1970s, a means of expanding higher education on the cheap, aiming at training urgently needed skilled manpower at post-secondary level. However, their nature and role change along with the changing needs of the society. Before 1986, they were regarded as an autonomous system of distance higher education relatively independent of their parallel local educational authorities. The Central Radio and TV University was directly governed by the Ministry of Education, with the Minister of Education entitled the President of the CRTVU. More autonomy was thus given to the University in terms of policy making, planning, entry qualification, enrolment as well as examination.

As the nationwide educational crisis for skilled labour force was alleviated, there emerged a trend of reform and decentralisation of educational management in higher education and the separation of governmental functions from academic ones in the late 1980s to meet the needs of local developments. The MOE was replaced by the Department of Media Education, which was under the leadership of the State Education Commission, for the supervision of the CRTVU in 1986. Local RTVUs, as stipulated in the *General Provisions for Radio and Television Universities* in 1988, became local institutions affiliated to the local educational authorities so as to meet the needs of local social and economic development. Therefore, the annual enrolment for the system was made subject to both national and provincial manpower forecast and applicants were required to sit the national entrance examinations before they were admitted.

In the mid 1993, the Adult Education Division under the State Education Commission took over the supervision for the CRTVU. Therefore, the nature and role of the system was made more clear than before, institutions of the non-formal higher education sector, aiming at providing mainly vocational and technical education to working adults for the needs of local economic development. The educational pendulum is swinging toward the institutionalisation of an adult education programme that emphasises quality and legitimacy over equality and access.

The roots, birth and practice of China's RTVUs gave the system low social status, which led it to an evolutionary process of convergence with mainstream education in order to obtain their academic credibility and legitimation in the field of higher education. China's RTVUs, therefore, have to conform to the fate of their colleagues in the non-formal higher education sector, providing pragmatic and polytechnical

education to adult students through multimedia with a traditional mode of teaching and learning. As Wedemeyer indicated:

> Traditional education has been the model which non-traditional teaching and learning has had to try to replicate, albeit with different instructional methods and students, in order to justify and maintain its existence" (Wedemeyer, 1981: p134).

It is, therefore, the historical influences, the geographic and demographic factors, the traditional ideas of higher education, the political implications, the rapid economic development, the financial resources, the local circumstances, the consideration of cost advantage, and the peer pressure that made China's RTVUs the way they are.

SUMMARY

To sum up, the idea and practice of distance higher education came from the model of the BOU, however, the practice and development of China's radio and TV universities were made confined to the Chinese higher education system of the past, present, and the future, proving an amazing adaptable way of dealing with problems that are unique to specific Chinese circumstances.

The selfish idea of serving individual students was replaced by the services China's RTVUs should perform for the training needs of society. Centralised measures in terms of policy making and overall planning were taken to ensure the attainment of the goal. Traditional way of teaching and learning, which has been incorporated into the Chinese culture for thousands of years, remains unchanged in the form of the selective examination system, group tuition and indoctrination. The only exception in adoption is the employment of multi-media for instruction. However, this adoption is mainly introduced to bringing classroom lectures into the RTVU campuses via radio and TV.

Distance higher education in China has never stood aloof from its cultural, social political and economic influences of the society. As Guy concluded:

> Theories and practices in distance education have emanated from industrialised countries and the metaphors that one used signify the attitudes and values, and modes of thinking, which are highly representative of those countries. Terms such as individual learning, personal work and independent of tutors (Holmberg, 1983), a plurality of scholarly positions (Holmberg, 1989), individualism, self-pacing, evaluation, apartness and autonomy (Moore, 1977), and division of labour, industrialisation and rationalisation (Peters, 1983) represent much of the thinking about distance education in the developed world at present, contain specific ideologies which may not be consistent or appropriate in third world cultures. The metaphors of distance

> education in the third world might be better thought of as community, relationship, support, practical knowledge and action, and the theorising about distance education in such a context may emphasise collectivism, group learning, dialogue, cooperation and agreed forms of knowledge (Guy, 1990: p58).

PART FOUR: THE NATURE AND ROLE OF THE BOU

This Part will be an attempt to explore the development, the nature and role of higher education in Britain to which the BOU belongs, so that a better understanding can be reached about the idea and practice of this distance teaching university.

THE GROWTH AND DEVELOPMENT OF HIGHER EDUCATION IN BRITAIN

British higher education has its roots in the culture and tradition of medieval Athens (Bligh, 1990: p22) and it has much reliance upon the authority of the classics, the church and the state.

Oxford University was founded in 1214, Cambridge University in 1318; for 500 years they were the only universities in Britain, though St. Andrews, Glasgow, Aberdeen and Edinburgh were established north of the border. They were regarded as the centres of education for the Church of England, concentrating on provision of academic study of law and medicine for the purpose of supplying cadres for the profession. Therefore they played little part in the training of science applied to industry. By the end of the 18th century there were only 7 universities in Britain which were effectively controlled by the church in terms of endowments, administration and curricular.

In the post-mediaeval period three great intellectual movements - the Renaissance, the Scientific Revolution and the Enlightenment - all came about without much impetus from the universities. Although universities began to cater for laymen as well as clergies, entry to higher education was almost entirely confined to the sons of the land-owning aristocracy. However, "when the Industrial Revolution brought about the replacement of human and animal muscles by machinery, British capitalists were eager to train the masses of working people to acquire technical skills so that production could be rapidly developed and high profits obtained" (Zhang & Stephens, 1992: p11), but the curricula provided by the existing old universities were far from the needs of the

capitalists. And when the pressures to reform the curricula and to train the middle class and lower class in applied science for industry at the older universities were firmly resisted, the establishment of new universities became a necessity.

In 1829 the second tradition of British universities, therefore, emerged headed by the setting-up of College of London. These universities were locally supported, vocationally oriented, and closely related to, and dependent upon, local business and industry, with middle class students largely living at home. They were established by a charter from the sovereign, and granted the permission to issue degrees of their own. Therefore, until 1870, Britain had no national school system and no public control of education. Schools were run privately or by religious bodies although many were financed by government grants in aid. University education, which was not in the hands of the state, was provided at Oxford and Cambridge for the upper class and at provincial universities for the middle classes. However, by the beginning of 20th century there were 18 universities and 4 colleges in Britain.

The year 1919 saw the creation of the University Grants Committee (UGC) which formalised the relationship between three parties responsible for university provision in the United Kingdom, the government, institutions and UGC. Furthermore, the impact of the First World War marked the end of the aristocratic tradition in England when the government had tended to regard higher education as a sound investment of public funding. Thus, by 1939 most of the familiar strands of British university life -general education, vocational training, research, and scholarship - had become woven together.

With the passing of the 1944 Education Act the government became more committed to education under the influence of the idea: education for all as a human right. More professions have looked to recruiting their members from higher education, therefore, higher education has extended its service role from elite professions to provide courses geared to an extensive range of professions. Reformation was also seen in old universities in terms of curricula and teaching methodologies. And the honours degree system and tutorial system were introduced as the main innovations in the universities both old and new.

In particular after the Second World War when American economist Schultz claimed that education was not to be viewed simply as a form of consumption but rather as a productive investment and education did not only improve the individual choices

available to men, but an educated population provides the type of labour force necessary for industrial development and economic growth in 1960, the function of higher education has taken on new dimensions. This human capital theory therefore provided justification for large public expenditure on education so as to result in rapid economic growth for society (Fagerlind & Saha, 1989:p18).

The Robbins Report, appointed by the Prime Minister in 1961 under the chairmanship of Lord Robbins to consider the pattern of full-time higher education in Great Britain, states that courses of higher education should be available for all those who are qualified by ability and attainment to pursuit them and who wish to do so.

> It did something extremely rare in British higher education by considering aims and objectives of higher education as follows: 1) Instruction in occupational skills (develop the nation's economy); 2) to promote the general powers of the mind (develop the intellect of the individual); 3) the advancement of learning (develop knowledge); and 4) the transmission of a common culture and common standards of citizenship (develop society) (Bligh, 1990: p11).

In accepting the Robbins principle, British government considered that the financial investment in universities was worthwhile in terms of its return, expressed both as increased wealth, and as an increased level of culture, civilisation and education (Allen, 1988: p44). Therefore a process began which ultimately, in 1963 integrated the universities into the educational system as a whole. However, the year 1964 is a crucial date in the development of British higher education and further extension of government power took place when the former Ministry of Education was transformed into the Department of Education and Science. From the year 1965 the country saw a considerable growth of polytechnics and the expansion of universities, - the establishment of a binary system in British higher education -, due to baby boom effect, explosion of knowledge, development of communication technologies and the rapid social and economic development of the whole western world. Therefore, this expansion of higher education system in UK was to be comprehensive and socially responsive, underlining the service functions which the system was being asked to perform.

In 1988 the government passed its Education Reform Act and it was supposed to create order while maintaining the diversity of institutions offering higher education in Britain. The Act saw the Universities Grants Committee replaced by the University Funding Council, which was more under the central government control. The polytechnics and colleges of higher education were released from their local authority

control and made independent under a similar polytechnics and Colleges Funding Council (Zhang & Stephens, 1992: p5) with their degrees validated by the Council for National Academic Awards. Therefore, what we see then is not just an accommodation between higher education and industry, but an incorporation of higher education into the central framework of a modern society dominated by the needs of new skills, new knowledge and new ideas.

The present British higher education covers a wide diversity of types of institutions, universities, polytechnics and colleges of higher education of about 350. Institutions covered by the Act can be classified into two sectors: private and public. There are also institutions not covered by the Act doing degree level work and they can also be divided into private and public. The meaning of the first 'private' is different from the second. The first refers to those universities which were established by a charter from the Sovereign and they are responsible to the Queen rather than to the government; while the second 'private' refers to those institutions which are sponsored by individuals or private bodies.

The present British higher education is characteristic of its binary system which involved the new sector of polytechnics in addition to the universities. Compared with polytechnics, universities are independent, autonomous bodies financed by the University Funding Council, and awarding their own degrees; the polytechnics would be financed through, and under the control of the local education authorities, and their degrees would be validated by the Council for National Academic Awards. However, under the provision of the Further and Higher Education Act in 1992, polytechnics and equivalent institutions were granted the same status as universities and were to be permitted to adopt the title "University". Polytechnics were henceforth empowered to award their own degrees. Therefore, universities and polytechnics, previously funded separately, were to be financed by a single higher education funding council (EUROPA, 1994).

Britain institutions of higher learning currently have a multi-purpose role: they provide general education, they undertake research; they train students for the professions; they assist industry, commerce and the public services; and they make a contribution to the arts.

Subjects within the curriculum are favoured to the extent that they make a clear contribution to the economy: the science and technological subjects are supported, and the humanities and social science subjects try to prove their worth, by developing skill-oriented courses (Barnett, 1990: p26).

THE PHILOSOPHIES UNDERPINNING THE PRACTICE OF HIGHER EDUCATION IN BRITAIN

The ideas of higher education in Britain are largely buried in the past. Unlike educational philosophies underpinning higher education in China, which were mainly dominated by vocationalism, the philosophies underlying British contemporary and modern higher education represent mainly three stages of development in terms of cultural and social interest. The first comprehensive philosophy of education is to be found in the writing of Plato, who perceived higher education as the cultivation of the individual for the sake of the ideal society. According to his ideas, the individual was to be helped to achieve inner happiness, which would allow the state to benefit from the harmony of satisfied citizen fulfilling their proper roles, an idea in some ways parallel that of Confucius (Allen, 1988: p15).

Therefore, the questions for medieval scholars was how to interpret what the ancients said, rather than replicate their findings. Higher education was then seen as a means of attaining salvation through the inculcation of faith, hope, and charity (Allen, 1988: p16).

> The essential curriculum for higher education consist of carefully selected subjects, presented in logical sequences, provide leaders with the intellectual skills, and presumably the moral fibre, expected of societal leader (Holmes and Mclean, 1989).

Although the objects of study were strictly controlled, one of the key methods lay in the use of structured discussions or disputations.

However, since the Church effectively controlled the universities by its system of endowments before the 19th century, it did not encourage the study of science, for the values of the church were based upon discipline not free expression, faith not doubt, corporate wisdom not individualism, and bookish leaning not scientific observation (Bligh, 1990: p28). The universities taught bookish subjects for memory than creative imagination and practical and manual skills were given low status. So the fragmentation of higher education provision has deep historical roots based upon bookish learning and attitudes about what is academically respectable.

The 15th, 16th and 17th centuries were a transitional period for higher education to break away from the mould of medieval times to the liberal education under the influence of the Renaissance, the Reformation and the Scientific Revolution. Freedom of

expression in arts and humanism movement all had implications for higher education in terms of genuine search for truth and values of individuals.

However, it was only with the coming of the Industrial Revolution that the ideas of liberal education exploded with series of revolutions against the regimes of church, royalty, aristocracy and state headed by the greatest advocate Newman, whose ideas of higher education still have the direct bearing upon modern British higher education. According to Newman higher education should offer an intellectual enlargement or an expansion of the mind, and it was intended to produce the formation of a character (Barnett, 1990: p20). Namely education was associated with knowledge for its own sake with the purpose to train the mind. Therefore, the central idea of liberal education was the idea of individualism and individual freedom, a liberal revolt against religious dogma and state authority of the time. It was centrally concerned with the struggle of reason against ignorance, moral values against brute force, freedom against tyranny, the tradition of which lay not only within the arts and humanities but also with social progress and disciplines of science (Weatherford, 1960: p10).

Thus the content of the curricular was drawn from original materials in the fields of politics, social science, philosophy, psychology, the arts literature, and science, dealing with issues and questions which could evoke genuine concern in the students. Universities in the 19th century had their own entrance examinations and the central method of teaching was the university tutorial. Each student was assigned to a tutor for whom, he wrote weekly essay, which was then critically discussed so as to develop individuality and independence of mind (Bligh, 1990: p52). Lectures had only a supporting role and the attendance was optional. They were replaced by a combination of discussion methods, independent study, tests of achievement, and a greater freedom and responsibility for the individual learner. Programmes of study were planned to individual needs, allowing those with the ability to go as far and as fast as their capacities could take them in those areas to which their aims, motives, and interests drive them. Furthermore, the value of immediate experience was recognised as a prime educational force (Weatherford, 1960: p25).

The goal of higher education was the pursuit of truth and learning, and the universities became viewed as institutions dedicated to the advancement of knowledge and the training of scholars. Therefore, what Newman was offering people was a particularly radical conception of liberal education. It was liberal not only in relation to

the range of potential subject matter or the teaching and learning methods, but also, and more importantly, it was liberal in terms of its effects on the individual (Barnett, 1990: p21).

In the aftermath of first world war higher education, through the fragmation of knowledge and its emphasis on useful knowledge, had underwritten nationalism and the new technological age. Against this background, Jasper and Kerr saw the possibility of the university playing a role in the reconstruction of a more humane society, but based on a more unitary and purposeful conception of knowledge. To them knowledge can be pursued as a narrow enterprise, but it also can be pursued with a broader sense of rationality, value and power of the creativity of the human mind. Therefore, higher education implies more than the acquisition of knowledge, university should be useful in many practical ways, to the society in which it existed (Allen, 1988: p20). Therefore, a shift from liberal education to the current phase with the vocational approach in ascendance is seen today due to changes in occupational structures as well as plans for economic growth.

Therefore, the education of formation of a clerkly stratum in medieval times, the response of the universities in the 19th century to industrial society, and the contribution that the universities could make to social reconstruction following the 20th century world wars all have roots in the specific historical contexts of the society. The philosophies that higher education took on are simply shifting ideologies.

> Plato's ideas, with their imagery of prisoners being led into the light, can be seen as an ideological justification of rule by the guardians. Newman's conception, in turn, can be said to be a thinly disguised apologia for an education for a leisured class faced with the claims of vocational education for the emerging bourgeoisie (Barnett, 1990: p23).

The prevailing vocationalism in higher education today can be seen as a reflection of market driven economy and government will to expand mass higher education.

THE NATURE AND ROLE OF THE BRITISH OPEN UNIVERSITY

The late 1960s saw the higher education expansion of both traditional universities and polytechnics in UK as a result of two decades of universal secondary education, and a period of unprecedented economic prosperity. However, too small a percentage (5%) of the age group obtained a university place. In order to accommodate the demands for higher education, six new universities were established and a dramatic expansion of degree places were seen at existing universities. But they made no impact at all on the adult who had been left out of university by the educational pyramid. Therefore, the idea of the open university was born, a deliberate attempt to correct the imbalance by providing an opportunity of higher education for those who for reasons of selective system or for reasons of personal choice, had not proceeded to the last sequential stage of the initial education system (Perry, 1978: p128).

Thus, in 1969 the British Open University was set up with a Royal Charter from the Sovereign. For this reason, universities in Britain are responsible to the Queen, not directly responsible to the government. This constitutional position of universities is important to preserve their freedom from government interference and the freedom of ordinary people from government control of knowledge (Bligh, 1990: p51). Thus, parallel to the British democratic political system, the OU adopted a binary internal organisation system, with overall control vested in the Council and the Senate like other traditional universities.

Its interdisciplinary foundation courses, learner-centred approach, individualised system of tutorials, counselling and study centres all reflect the ideas of liberal education for personal improvement, development and advancement. However, its priority on the needs of working adults has roots in the long history of part-time higher education in the UK.

As early as 1825 evening classes were offered in University College, while Kings College went further to set up an evening class department. They held up well and remained in operation until the First World War. The federal university system which was established in 1836 played a role of an examining body, associated colleges and institutions carried out the teaching. Moreover, external forms of higher education were also offered by other institutions. Non-resident study for degrees became possible in the late 18th century. Thus, "part time courses were a major part of activities of all of the

universities established in provincial British cities during the latter half of the 19th century" (Lawsen & Rothblatt, 1975).

Two other development of importance to part-time higher education took place in the last quarter of the 19th century. The first was the growth of correspondence education, which was dependent upon contemporary innovation in printing, and on the establishment of a cheap and reliable postal service. The second development was the growth of the university extension movement. Largely based on the universities of Cambridge, London, Manchester and Oxford, this movement brought university lectures to towns and cities in many parts of the country.

The courses were mostly in the arts, humanities and social sciences, and in the professional subject areas. The main mode of provision was varied, from block release basis, evening classes, correspondence study to independent learning. The entry and exit arrangements were more flexible than that for full-time students and the length of learning usually took longer period of time. Before the First World War part-time students in London University and some civic universities even outnumbered full-time students (Tight, 1991: p10). Even if there was nothing approaching a national system of part-time higher education, it was the norm at the end of the 19th century.

Although government involvement in the first half of the 20th century saw higher education move towards a narrower and more elitist way with more standardised curriculum, part-time students remained fairly constant throughout the period. The early experience of part time higher education provided foundation as well as inspiration for later establishment of the BOU, however, "the development of the OU was subject to a variety of forces by being regarded as a potential element of several systems: the word 'university' and its commitment to prepare students for its own degrees caused it to be regarded as part of higher education; by catering for adult students it entered the areas of adult education; the part-time nature of its students made further education considerations appropriate. Therefore, this multi-responsibilities of the OU forced its development along the path that led to comparability with existing universities wherever possible" (Hoult, 1975: p138).

However, since the early 1980s, UK universities have been moving away from a situation where the vast majority of income was granted by government source to one where a significant proportion is earned from a wide variety of other sources. This change has meant that universities had to respond to the forces of both government and

market. Although the funding source for the BOU before 1992 was from another government body, it also suffered from one financial cut after another, which made it move towards provision of professional subjects by bringing the world of industry inside the OU (Live & Learn, 1995). Professional, technical, refresher and conversion courses were included later on and the changes have affected the roles of staff as well as the management style, which has shifted from a collegial towards a more corporate model of functioning (Thorpe, 1995).

In the present age restructuring and globalisation have dominated the politics of the western world. What has happened is a new economic order characterised by greater internationalisation and globalisation (Bottomley, 1995). Effects on the education system include a vocational focus on secondary and post-secondary education, the advent of competency-based education and training movements, and shifts from free education towards user pay principles with distance education in the vanguard (Chambers, 1995). A perceived need for a workforce that is multi-skilled and adaptable and for programmes of training and retraining appeared, and the BOU is now playing a crucial role in bringing together academic and vocational qualifications, higher education and advanced learning to prepare the individual for employment and society for economic competition in an international marketplace (McMurtry, 1991).

Therefore, the ethos of the BOU is still liberal education, while the thrust of development, however, is moving in another direction. Two approaches can be seen clearly in the changing nature and role of the British Open University in terms of traditionalist and utilitarian functions, which represent the conceptions of liberal education and vocational education. However, its mission to be open to people, places, methods and ideas will always remain unchanged.

To sum up, the birth and development of the BOU has its roots in evening class, correspondence education as well as university external study. Its aims and objectives, however, reflect the influence of liberal arts tradition which dominated the world of higher education in UK in the 19th century. Its focus for the expansion of educational opportunities was based upon the idea of self-improvement and the need for an individually educated population as both a contribution to extending democracy and an attempt to give individuals more rights, more opportunities and a better quality of life.

From this liberal philosophy various of means and measures were taken in order to serve the needs of individual students. However, no exploitation of current development can avoid the new emphasis on the need to update skills and adapt to the economic and social demands of a changing world. The recent practice and development witness the convergence of the OU into the mainstream higher education in terms of sharing unified funding system and standardised curricula with other traditional universities and sees its development moving towards professional training and updating.

The BOU expects that the future international expansion will take advantage of modern media and technologies, utilise electronic means of two-way communication to provide individual education systems capable of giving rapid feedback to persons who are a part of dispersal, heterogeneous student population. As Peters indicated that the new technology comprises the world of computers, communication systems and further inventions of electronics. Perhaps the change will be as fundamental as the change from the craftsman's technology to industrial technology. Accordingly, general and academic goals of study which may help in the process of self realisation are more important than strictly vocational and professional goals. Lifelong learning will have ceased to be merely a slogan, and will, indeed, be practised widely. There will be an even greater demand for distance education than there was in the industrial era in which it developed (Peters, 1993: p223).

SUMMARY

By summarising the Third and the Fourth Parts, we can see that any national system of higher education exists within the context of its own society. Throughout Chinese history, higher education has served the purpose of maintaining political and social order and promoting economic development. The social ethics of duty and loyalty in higher education has resulted in the neglect of individualism. Students have been considered as passive consumers of information rather than active participants (Bih-jaw Lin & Lin, 1990). All these have great implications for China's RTVUs since they belong to the non-formal sector of higher education system.

The goal of China's RTVUs is to meet the social needs of training for needed manpower. Therefore, programmes are developed based on the manpower planning at both central and local levels rather than on the requirements of individuals. Thus, students need to be taught and to be moulded into the products demanded. Like their

counterparts in the formal higher education sector, China's RTVUs are characterised by their socialism in policy making and overall planning; their polytechnicalism in curricular; and their Confucianism in the teaching methodology.

The British Open University has its roots buried in the conventional higher education as well as the adult higher education sectors, which are greatly influenced by the ideas of liberal education in terms of self improvement and development, individualism and individual liberation. Unlike Chinese RTVU system, the BOU is not responsible to the government, which allows itself the autonomy to authorise policy making and overall planning. Programmes provided are more academic and general in nature, catering for the needs of individual student with a diverse social and educational background. Compared with Chinese system, liberalism in macro management, essentialism in curricular and individualism in the teaching and learning approaches are the three characteristics of the BOU.

Therefore, both China's RTVUs and the BOU have been established taking into account the peculiar conditions of the country and representing their own national characteristics (Reddy, 1993: p241).

CONCLUSION

China is the largest developing country in the world, with an area forty times of Britain, a population twenty times larger, but with GNP per capita only one thirty-sixths of Britain. Its educational needs are great. Therefore distance education appears to have great potential in the context of China. It offers a new way of providing additional access to education at various levels to large numbers of students at a relatively lower cost.

China's RTVUs were a creation of the government will in the late 1970s for the training of urgently needed manpower for the construction of four modernisations, therefore, the control model of governance at both central and local levels is adopted to ensure the specific service China's RTVUs are expected to provide for socio-economic development. Policy-making, overall planning, programmes provision, admission, enrolment as well as graduation all rest with the governments rather than the institutions. Although multi-media devices are introduced for the transmission and instruction of education, the whole system is more an extension of traditional classroom teaching through radio and television due to desire for academic credibility and legitimation and deep-rooted ideas of higher education as well.

Unlike the BOU, China's RTVUs belong to the non-formal sector of the higher education system, which is characterised by its low social status, vocational and technical orientation, association with qualifications, and close linkage with social and economic development. Therefore, the adoption of the BOU model is by no means an indication that China's RTVUs will borrow wholesale the ideas and the approach. Rather they have been established in accordance with the political, social, cultural and economic structures and situation of the country.

However, the BOU was a child of the 1960s. It had its origins in the coming together at that time of related political and educational developments. On the one hand there was the desire and the commitment of the Labour Party to introduce a major egalitarian innovation into a narrowly elitist higher education system, and thereby provide a stimulus to economic and technological development. And, on the other hand, there was the impetus produced by the expansion of adult education, and the excitement generated by a series of educational experiments using radio and television (Hoult 1975; Sherow and Wedemeyer 1990).

Thus, established as an autonomous university by a Royal Charter, the BOU has the autonomy to make its own decisions, and it also enjoys a high social status for its high academic quality and credibility like other conventional universities in Britain. The main difference is that the BOU focuses its attention on students who had been precluded from achieving their aims through an existing institution of higher education, and provides a truly integrated teaching system to deliver courses at a distance through print, broadcasting and self-study.

Although the roots of the BOU lie deep in the long history of correspondence education, external studies and part-time higher education in Britain, it is more influenced and generated by the ideas of egalitarianism, democracy and life-long education in the 20th century.

However, the comparison of the definition of distance education in these two countries reveals little difference in written forms. Why do they share the same notion but have different practice? First of all, gratitude should be given to the western distance education theory builders for providing us with such a generalisation of the notion that the interpretation of which can be made to fit perfectly every context, developed and developing, capitalist and socialist, west and east. Secondly, we have to go back to the nature and role of each higher education system, to which each distance teaching system belongs, for an answer since Chinese government is more than pleased to keep the notion of distance education in line with the international trend, but its practice with the national circumstances.

British higher education, which was greatly influenced by the ideas of liberal education of the 19th century, focuses on the provision of broadly-based higher education to meet the needs of individuals for the purpose of self development, pursuit of truth and academic advancement as well as specialist degrees. However, China's higher education system, with a long history of coordination between the traditional knowledge system and the political power structures more perfectly articulated than the linkage between the universities and the civil state in UK, is characterised by its submission to the government for the good of society at the sacrifice of individualism.

Therefore, distance higher education is part of a higher education system which is the segment of a national educational system, while the national educational system is the subsystem of the larger political, social and economic systems. As indicated by Haddad: "One of the more important characteristics of the education system lies in its salient

linkage with the socio-economic structure" (Haddad, 1994:p9). The nature and role of distance higher education, therefore, is closely linked with that of higher education in the different contexts.

Whether in a developed or developing country, the birth, development, adaptation, responsiveness of distance higher education vary not simply by their historical circumstances but also by the type of society they are in. Namely, different types of society allow different kinds of distance education to take place, and societies differ radically in their capacity to overcome the constraints of the past and to conceive of new options for the future.

TABLES

TABLE 1: Communication and Telecommunication Services in China

Service	Volume in 1991
Railroad	3,415 Kilometres
Highway	1,041,136 Kilometres
National Telecommunication Microwave system	54,000 Kilometres
Radio Coverage of Population	75%
Radio Station	724
Mid-wave, Short-wave and Relay System	706
Frequency Modulation System	799
Radios per 100 population	18
Television Coverage of Population	80.5%
TV Stations	543
1 KV and above Transmitter and Relay System	985
Satellite Earth Station for Broadcast	28,217
TVs per 100 population	3
Telephones in Service (urban)	6,708,300
Telephones in Service (rural)	1,742,300
Telephones per 100 population	1.8

SOURCE: *China Development Report*, 1992, State Statistical Bureau (1993)

TABLE 2: The Cost Structure of the British Open University

Type of cost	1989 (Pound Million)
Fixed	
Development of courses	15.012
Production of courses	14.207
Semi-fixed	
Central costs	22.009
Presentation & distribution	21.410
Student support	16.643
Total	89.281

SOURCE: Review of the Open University, EDS/OU, 1991

TABLE 3: Differences of China's RTVUs and the BOU in Contexts, Origins, Objectives, Structures, Funding and cost

	China's RTVUs	The OU
Area	9.6 million square KM	244,786 square KM.
Population	1,170 million	57.8 million
GNP per capita	$ 470	$ 17,790
Underpinning ideas	human capital theory	egalitarianism, democracy, lifelong leaning
Academic autonomy	controlled	rest with the OU
Goal of DE	to serve the needs of society & economy	to help individuals
Governmental structure	centralised	binary
Organisational structure	associated	hierarchy
Programmes provision	unified centrally	centralised
Aims and Objectives	training of needed manpower	higher education for working adults
Funding	governments, employers	government, fees
Cost structure	low fixed cost, high variable cost	high fixed cost, low variable cost

TABLE 4: Faculties Provided by the Central Radio and Television University

Degree level	Faculties	Majors	Launched in
Diploma education	Engineering & Technology	Mechanical	1979
		Electronic	1979
		Electric	1979
		Chemical & light industry	1982
		Civil engineering	1984
		Management	1984
		Applied computer	1986
		Mechanic-electronic	1992
	Humanities	Chinese language & literature	1982
		Administration	1984
		Law	1985
		Journalism	1985
		Library science	1985
		Archive science	1985
		Politics & history	1988
	Economics	Business management	1983
		Accounting & Auditing	1983
		Statistics	1983
		Banking	1983
		Finance & taxation	1983
	Agronomy	Planting	1988
		Teacher training	1988
Bachelor Degree		English education	1996
		Law	1996
		Computer science	1996

SOURCES: University File, the CRTVU and Jiangsu RTVU (1993), *Education Statistics Yearbook of Radio & TV Universities in China*, the CRTVU Press, Beijing (1995)

Courses for Non-degree Learners by the CRTVU

Non-degree	Courses	Launched in	cooperated with
In-service training	Accounting	1987	
	Auditing	1988	
	Banking	1988	
	Library science	1988	
Continuing Education	Continuing education for modern engineers	1986	Beijing Economic Commission
	New techniques in electronic field	1986	
	Functional words analysis to scientific English	1986	China Electronic Society
	Restructuring finance system	1987	Ministry of Finance
	Banking market	1987	China Bank
	Principles & practices of China's foreign economic relations	1988	Ministry of Foreign Economic Relations
	Continuing education for chemistry engineers	1988	
	Basic method of auditing	1988	State Auditing Bureau
	Public transportation	1988	
	Linguistics	1988	

SOURCES: University File, the CRTUV(1993)

TABLE 5: Admission, Graduation and Enrolment of China's RTVUs Students (1979-1995)

	Admission		Graduation		Enrolment	
Year	**Degree**	**Non-degree**	**Degree**	**Non-degree**	**Degree**	**Non-degree**
1979	97,746	224,725	---	---	97,746	224,725
1980	79,377	80,124	---	92,714	167,962	n.a.
1981	---	---	---	47,590	170,391	n.a.
1982	184,973	68,083	92,022	94,566	258,488	n.a.
1983	235,567	18,728	67,905	61,286	414,054	n.a.
1984	205,858	11,992	17,032	105,185	599,068	n.a.
1985	273,112	11,446	165,204	75,386	673,634	n.a.
1986	215,200	21,861	248,778	142,015	604,437	n.a.
1987	130,029	65,500	178,891	11,310	565,948	n.a.
1988	191,914	n.a	275,007	n.a.	453,778	n.a.
1989	124,542	n.a.	131,200	n.a.	417,400	n.a.
1990	112,214	534,837	115,900	399,863	387,800	467,275
1991	103,480	1,137,576	161,100	1,513,000	334,800	513,980
1992	143,637	837,591	122,200	1,058,179	335,500	522,467
1993	218,596	574,279	98,043	930,293	438,609	384,439
1994	232,217	762,561	100,673	692,549	547,925	922,625
1995	200,585	758,036	157,780	826,540	545,290	547,785
Total	2,749,147	5,107,339	1,931,735	6,068,476	7,012,830	3,583,296

SOURCES: *Adult Higher Education Statistics*, from Dong, M. (ed, 1993); *Education Statistics Yearbook of Radio and TV Universities in China*, (1990-1995)

TABLE 6: The Occupations of Registered Students of the OU (1971, 1976, 1981, 1986, 1988, 1989)

Occupation(%)	1971	1976	1981	1986	1988	1989
Housewives	10.1	14.8	17.7	16.5	17.2	16.7
Armed Forces	1.7	3.2	3.1	3.3	3.8	3.6
Admin & managers	5.0	4.6	3.2	3.9	3.8	4.4
Teachers and lecturers	40.1	26.8	20.4	10.0	8.1	7.4
Prof & arts	8.5	11.0	11.0	11.7	12.6	12.3
Science & eng	6.4	4.0	3.4	3.0	3.2	3.4
Technical personnel	12.1	10.8	12.1	12.9	12.2	13.9
Skilled trades	1.4	3.0	3.8	5.0	4.7	4.9
Other manual	1.2	2.3	2.8	2.7	2.7	2.9
Comms & trans	0.8	1.8	2.0	2.0	2.0	1.9
Clerical & office	6.4	9.8	11.2	11.2	12.2	12.5
Shop & personnel	2.9	4.4	4.9	6.1	6.7	6.6
Retired - not work	1.5	3.0	3.9	11.2	9.9	8.7
In institution	0.3	0.5	0.6	0.7	0.9	0.9
No information	1.6	0	0	0	0	0
Total	100.0	100.0	100.1	100.2	100.0	100.1

SOURCE: Review of the Open University (1991), The Department of Education and Science & The Open University

TABLE 7: Transmission of China's RTVUs Programmes by Radio and TV

Broadcasting organisation	Media used	Coverage	Time available
CCTV* **(CRTVU Courses)**	Microwave & satellite	Nationwide	22 H***/week, 8:00-12:00 am, (Mon.-Sat.)
CETV** **(CRTVU Courses)**	Satellite	Nationwide	84H week, 16:00-22:10 pm, 9:00-11:45 am, (Mon.-Sat.)
Provincial & Civic TV (For CRTVU & PRTVU Courses)	Microwave	Regional	Varies locally
Provincial Radio (For CRTVU & PRTVU Courses)	Midwave	Regional	Varies locally
County TV Relay Station (For CRTVU Courses)	Microwave & Satellite	Regional	Varies locally
Brach Schools, Work Stations & TV Classes	Audio cassettes & video tapes		

SOURCES: *China ETV News and Programmes*, State Education Commission; University File, the CRTVU and Jiangsu RTVU, 1993

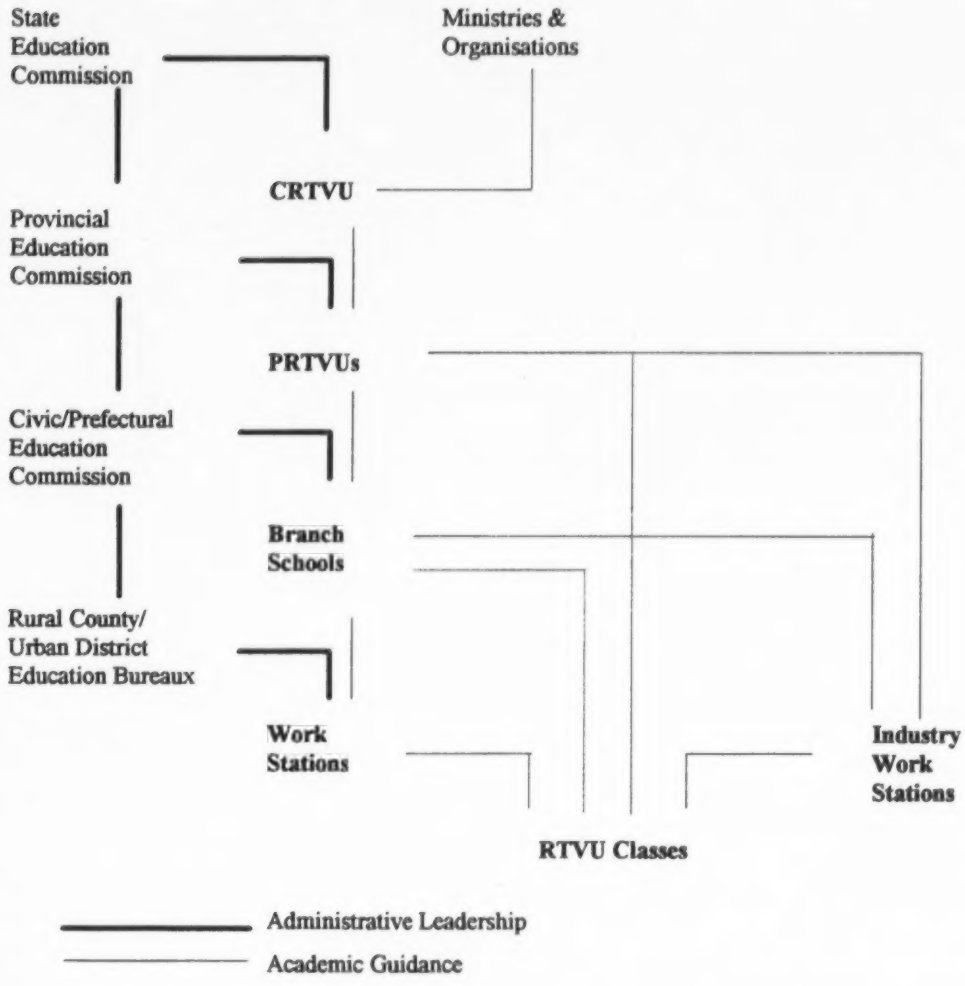
NOTES: *China Central Television under the Ministry of Broadcasting,
**China Education Television under the State Education Commission,
***One teaching hour lasts fifty minutes

TABLE 8: Difference of China's RTVUs and the OU in Programmes, Learners and Taching and learning

	China's RTVUs	The OU
Programmes	vocational & technical	general academic
Degree levels	diploma, secondary	post-graduate, undergraduate, diploma
Academic system	two or three-years, three or six years	no time limit
Credit system	Academic year, no transfer	ten year accumulation, credit transfer
Learners	Adults, middle school, graduates	adults above 18
Male	72%	52%
Female	28%	48%
Age	24 years old (average)	25 years old above (90%)
Background	urban-based employees	diversified
Course production	centralised planning, associated production	centralised
Radio/TV	10-30% of the course	5% of the course
Printed material	knowledge-based, textbook	structure-based, tutorial in print
Face-to-face tutorial	compulsory	optional
Teaching methodology	lecture-based, indoctrination, teacher-centred	independent study, learner-centred
Learning style	group tuition	self study

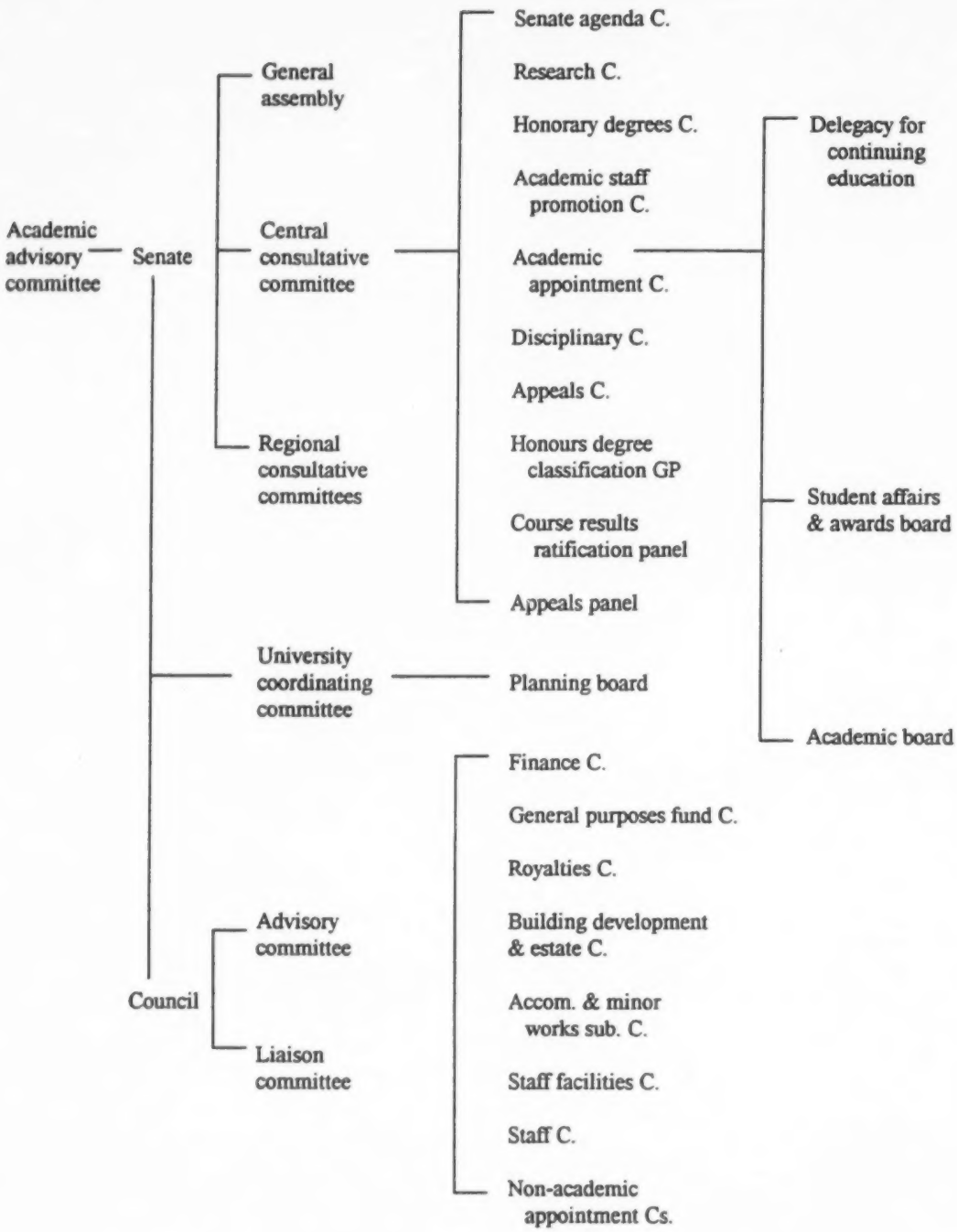
FIGURES

FIGURE 1: Five Levels of China's RTVUs



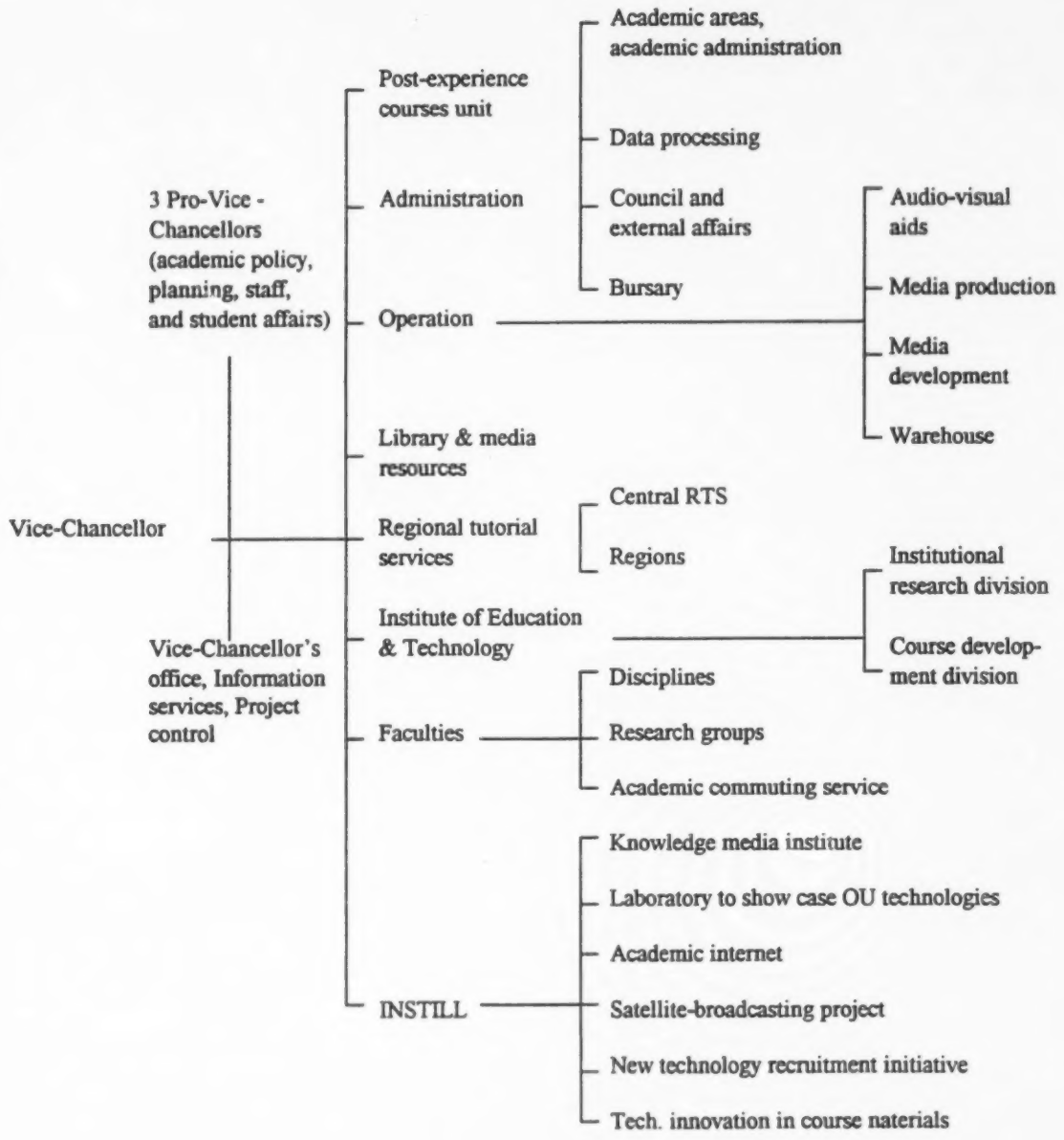
SOURCES: *General Provision for Radio & Television Universities,* State Education Commission (1988); Zhao, Yuhui (1988)

FIGURE 2: Government Structure of the BOU



SOURCE: DERG Papers, No. 6, 1982

FIGURE 3: Organisational Structure of the British Open University



SOURCES: DERG papers, No. 6, 1982; Hoult, 1975; Top Ten, 1995

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